

*The County Borough of
Halifax:: Health Dept.*



ANNUAL REPORT
ON THE HEALTH
of the BOROUGH

FOR YEAR ENDED DEC. 31, 1910

*Printed by Order of
the Health Committee*

1911

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HALIFAX.

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**Medical Officer of Health and Superintendent of the Borough
Fever Hospital.**

JAS. T. NEECH, M.D., D.P.H.

Assistant Medical Officer of Health.

J. F. HODGSON, M.D., D.P.H.

Public Analyst.

J. A. DEWHIRST, F.I.C., F.C.S.

Chief Sanitary Inspector and Scavenging Superintendent.

DAVID TRAVIS, A.R.S.I., F.S.I.A.

Veterinary and Meat Inspector.

J. POLLARD, M.R.C.V.S., D.V.S.M.

District Sanitary Inspectors.

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R. PICKARD.

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Lady Health Visitor.

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COUNTY BOROUGH OF HALIFAX.

REPORT

OF THE

MEDICAL OFFICER OF HEALTH,

JAS. T. NEECH, M.D., D.P.H.

FOR THE YEAR 1910.

INTRODUCTION.

*To the Chairman and Members of the Health
Committee.*

GENTLEMEN,

Since I had the honour of presenting you with the Report which follows, and which is the 38th Annual Report of the Medical Officer of Health for the Borough, the result of the recent census has been made known, when to the astonishment of most of us, the population of the Borough was shown to have decreased during the past 10 years, and now stands at 101,556. This of course means that the deathrates as calculated in the Report will be inaccurate, although even this serious fall in the population will not make so much difference in the rates as some might imagine.

These deathrates, together with those of previous years, will be corrected, all being well, in my next Annual Report.

Although the deathrates for the year under review have been calculated upon too large a population, so also

have those of previous years, consequently the deathrates in the report which follows, though not actually, are relatively correct in comparison with those years.

I consider the report which follows to be a highly satisfactory one, because there has been an increase in the marriage rate as well as the birthrate. The general deathrate is the lowest on record, so is that from Phthisis, as well as from respiratory diseases, but perhaps the most remarkable result obtained during the year was the marked fall which occurred in the infantile deathrate. There were only 89 deaths of infants under one year of age per 1,000 born, which is ten below the rate for the previous year, and is by far the lowest mortality yet recorded.

No changes have taken place in the staff of your department during the year.

In conclusion I desire to acknowledge the assistance rendered me by Mr. Travis and the District Sanitary Inspectors during the year, as well as Messrs. Jackson and Carlton, and also to thank your Committee for its generous support.

I am,

Gentlemen,

Your obedient Servant,

Jas. J. Keech M.D. D.P.H.

MEDICAL OFFICER OF HEALTH.

TOWN HALL,
HALIFAX,

May 24th, 1911.

STATISTICAL SUMMARY.

	1910	1909
	ACRES	
Area of County Borough ...	13,650	...
Rateable Value ...	£493,023	£495,401
Population, estimated to middle of 1910 ...	108,200	107,750
Population, 1901 Census ...	104,936	...
Persons per Acre ...	7·9	7·8
Average number of Persons per Inhabited House, 1901 Census...	4·2	...
Average number of Persons per House, 1901 Census ...	4·0	...
Birth Rate, 1910 ...	17·1	17·0
„ Average for previous 10 years ...	20·0	23·9
Death Rate, 1910 ...	14·2	15·3
„ Average for previous 10 years ...	15·4	15·7
„ Corrected for Institutions ...	13·2	14·4
Death Rate for seven principal Zymotic Diseases ...	·70	·77
Death Rate, the mean for previous 10 years of Zymotic Diseases ...	1·0	1·0
Deaths of Infants under 1 year per 1000 Births ...	89	99
Illegitimate Births...	102	83
Average Age at Death, 1910—		
Males ...	42·3 years	42·0 years
Average Age at Death, 1910—		
Females ...	47·1 years	47·3 years
Latitude—North ...	53° 43'	...
Longitude—West ...	1° 52'	...
Height above Sea Level, feet...	625	...
Total Rainfall, inches ...	36·62	35·69

Area and Population of the Borough.

The population of the Borough as estimated by the Registrar General for the year 1910 was 112,818. This figure is arrived at by assuming that its rate of growth has been in the same proportion as was the case prior to the Census of 1901. It is very desirable that the number of inhabitants should be as accurately calculated as possible, because upon that figure the various death-rates are based. Over 9 years have elapsed since the last Census, and after such a long period, it is impossible to accurately estimate the population of the Borough. Taking all facts into consideration, I am of opinion that the Registrar General's estimate is too high, and consider that in the middle of 1910, 108,200 would be nearer the correct figure, and the deathrates in this report are worked out on that basis.

By the time this Report is published, we shall doubtless be in possession of the result of the recent Census, and any inaccuracies in the statistics, resulting from the calculation of the deathrates upon an incorrect population, will be remedied in my next Annual Report.

The Borough is divided into 15 wards, and has an area of 13,650 acres. The following table gives the estimated population, acreage, &c., of the various wards.

WARDS			Population Estimated to Middle of 1910	Acreage	Persons per Acre	Number of Houses Built during 1910
Ovenden	...	...	7490	531	14.1	...
Akroydon	...	...	6800	582	11.6	...
North	...	...	7500	168	44.6	...
Central	...	...	7325	82	89.3	...
West	...	...	8580	86	99.7	...
South	...	...	7500	296	25.3	12
East	...	...	6500	191	34.0	...
Southowram...	...	...	7400	777	9.5	...
Skircoat	...	...	11265	513	21.9	44
Copley	...	...	3290	532	6.1	18
Pellon	...	...	9500	241	39.4	...
Kingston	...	...	11130	238	46.7	8
Illingworth	...	...	7550	4504	1.6	1
Northowram...	...	...	3400	1555	2.1	7
Warley	...	...	2970	3354	.8	...
Totals	...	...	108200	13650	...	90
Average...	...	...	...	...	7.9	...

Marriages.

There were 1,130 marriages solemnised within the Borough during 1910, compared with 990 during the previous year, giving a marriage rate of 10.4 against 9.1 during 1909, or an increase of 1.3 per 1000. This is the highest recorded marriage rate since the year 1901.

There has been a gradual fall in this rate since the latter year. No doubt the improved condition of trade

has had its influence in this direction. The marriage rate of Halifax, however, is remarkably low, when compared with many other large towns.

In the following table the marriage rate of Halifax is compared with that of England and Wales, and it will be seen that while there has been a gradual fall in the latter rate, the fall has been very marked in the former. In the year 1897 the marriage rate for Halifax was almost equal to the general rate of the Country, while it is now fully 30% below that of the above year.

YEAR	MARRIAGE RATE	
	Halifax	England & Wales
1897	15·9	16·0
1898	10·4	16·2
1899	12·3	16·5
1900	11·2	16·0
1901	10·5	15·9
1902	9·8	15·9
1903	9·5	15·8
1904	9·7	15·2
1905	9·7	15·2
1906	9·5	15·6
1907	9·9	15·7
1908	9·4	14·9
1909	9·1	14·5
1910	10·4	14·7

The following table shows where the marriages were solemnised.

In Churches of Church of England	655
In Nonconformist places of Worship and at the Registry Office	475
Total	1130

Births.

The number of births registered during the year in Halifax was 1,860, an increase of 20 compared with the previous year.

The birthrate therefore was 17·1 per 1,000 compared with 17·0 for the year 1909, the latter being the lowest yet recorded.

My annual report for the year 1908 showed a marked improvement in the birthrate of the Borough, and after the serious fall in this rate during the succeeding year of 1909, there is at any rate some satisfaction in the slight improvement shown during the year under review. It is to be hoped that in view of the increased marriage rate during the past year, this improvement will continue.

The births registered included 926 males, and 934 females. As a rule there are more males born than females, but the reverse was the case during the past year.

The birthrate has been falling more quickly than the deathrate, but the slightly increased number of births during the year under review, and the reduced number of deaths, has considerably increased the excess in the number of births over deaths. The excess of births over deaths for the previous year was the lowest on record.

The following table compares these figures for the past 10 years.

Year	Births	Deaths	Excess of Births over Deaths
1901	2351	1709	642
1902	2225	1634	591
1903	2248	1592	656
1904	2154	1643	511
1905	2072	1618	454
1906	2070	1674	396
1907	1927	1558	369
1908	2118	1561	557
1909	1840	1552	288
1910	1860	1431	429
Average ...	2086	1597	489

The average birthrate of the Country is gradually falling, and in many places the fall has been marked, so that Halifax is not alone in this respect.

The following table shows the average birthrate of England and Wales, and Halifax, in quinquennial periods, since the year 1875, and shows the marked fall which has taken place in the birthrate of the Borough, compared with that of the Country as a whole.

Period	England and Wales	Halifax	Difference	
1875-9	35·3	35·7	+	0·4
1880-4	33·8	30·7	—	3·1
1885-9	31·4	28·0	—	3·4
1890-4	30·7	25·4	—	5·3
1895-9	29·7	23·1	—	6·6
1900-4	28·4	21·5	—	6·9
1905-9	26·5	18·5	—	8·0
1910	24·8	17·1	—	7·7

There were 102 illegitimate births registered within the Borough during the year, which is equal to 5·4% of the total births, a figure which has been only once exceeded, viz., in the year 1908, when the percentage was 5·6.

The following table shows the number of illegitimate births registered during the past 20 years, and the rate per cent. which these births bear to the total number of births registered.

Year	Number of Illegitimate Births	Rate per cent. to whole Number of Births
		Average
1891	51	2·3
1892	78	3·5
1893	73	3·2
1894	73	3·4
1895	51	2·3
1896	65	2·7
1897	44	2·0
1898	58	2·6
		2·7
1899	58	2·5
1900	75	3·2
1901	101	4·2
1902	89	4·0
1903	102	4·5
1904	113	5·2
1905	97	4·6
1906	99	4·7
		4·1
1907	84	4·3
1908	120	5·6
1909	83	4·5
1910	102	5·4
		4·9

It will be observed that the percentage of illegitimate births has considerably increased during recent years, and is almost double what it was 15 years ago.

The average birthrate of the 77 great towns for the year 1910 was 25 per 1,000, and only three of those towns had a lower birthrate than Halifax, viz.:—Hastings, 13·4 ; Hornsey, 14·0 ; and Bournemouth, 17·0 per 1,000 respectively.

The birthrate of Halifax is considerably below that of all the 33 great provincial towns.

The birthrate of England and Wales for 1910 was 24·8, against 25·6 for the previous year, or a decrease of ·8 per 1,000.

The birthrates of the other Yorkshire great towns were :—Leeds, 22·2 ; Sheffield, 26·5 ; Bradford, 18·6 ; Hull, 28·6 ; Huddersfield, 22·9 ; York, 22·6 ; and Rotherham, 28·3 per 1,000 respectively, all of which show a decreased birthrate for the year.

The number of births and birthrates during each quarter of the year are shown in the following table.

Period	Males		Females		Totals		Birthrate per 1000 living	
	1910	1909	1910	1909	1910	1909	1910	1909
1st Quarter ...	224	206	230	214	454	420	16·7	15·5
2nd „ ...	253	254	285	231	538	485	19·8	18·0
3rd „ ...	230	232	233	223	463	455	17·1	16·8
4th „ ...	219	250	186	230	405	480	14·9	17·8
Whole Years ...	926	942	934	898	1860	1840	17·1	17·0

On referring to the above table it will be seen that each of the first three quarters showed an increased birthrate, while that of the fourth quarter a considerably reduced one.

The following table gives the birthrates of the different Wards of the Borough during the past five years.

WARDS			BIRTHRATES					
			1906	1907	1908	1909	1910	Average
Ovenden	...	...	19·9	20·2	21·6	17·6	18·5	19·5
Akroydon	...	...	23·2	24·0	22·3	19·8	18·5	21·5
North	...	...	25·1	21·1	25·6	22·9	24·1	23·7
Central	...	...	18·1	18·7	22·0	20·9	20·7	20·0
West	...	...	17·9	17·0	17·8	16·4	18·4	17·5
South	...	...	14·3	12·4	15·6	13·6	12·2	13·6
East	...	...	17·5	13·1	16·2	15·8	13·2	15·1
Southowram	...	...	22·4	20·3	24·7	20·3	25·0	22·5
Skircoat	...	...	17·5	18·9	19·5	15·1	17·3	17·6
Copley	...	...	17·7	22·2	16·9	21·8	13·0	18·3
Pellon	...	...	17·3	16·8	17·7	14·6	15·3	16·3
Kingston	...	...	18·3	15·0	17·9	13·1	12·8	15·4
Illingworth	...	...	18·1	15·0	16·1	15·9	13·2	15·6
Northowram	...	...	21·5	19·1	25·0	15·5	20·0	20·2
Warley	...	...	20·2	15·0	17·9	19·1	15·1	17·4

The above table shows that the birthrate varies from 12·2 in South Ward to 25·0 per 1,000 in Southowram Ward, and that the average for five years varies between 13·6 in South, and 23·7 in North Ward.

There were 94 children buried as still-born during the year, according to information furnished me by the Sextons and Caretakers of the various burial grounds in the Borough, against 104 during the previous year.

The number of still-births notified during the year was 48 only, consequently only about half the still-born children appear to be reported at this office.

The number of still-born buried in each of the burial grounds during the past two years is shown in the following table.

Name of Burial Ground	Number of Still-born Children Buried therein	
	1910	1909
Moor End Chapel	1	0
Nursery Lane Wesleyan	0	0
St. George's, Ovenden	0	0
Providence Chapel, Ovenden	0	2
Illingworth Church	1	6
Christ Church, Pellon	10	12
Illingworth Wesleyan Chapel	0	1
Mount Zion, Ovenden	1	1
Borough Cemetery	22	23
Wesleyan Chapel, Northowram	0	0
All Saints' Church	3	6
Heywood Cemetery	4	6
Bradshaw Church	0	1
Mount Tabor Burial Ground	0	0
King Cross Wesleyan	14	10
St. Paul's Church, King Cross	12	10
All Souls' Cemetery	9	11
Warley Church	3	1
Wesleyan Chapel, Luddenden	0	0
Lister Lane Cemetery	4	0
St. Thomas' Church	10	14
Totals	94	104

The total number buried during each of the previous eight years was :—1901, 108 ; 1902, 86 ; 1903, 118 ; 1904, 121 ; 1905, 113 ; 1906, 112 ; 1907, 113 ; 1908, 101.

Deaths.

The total number of deaths registered within the Borough during the year was 1543. That number however includes 139 deaths which occurred in institutions in the Borough, and which belonged to outside districts. The following table gives the institutions in which these deaths occurred, and the districts to which they belonged.

DISTRICT	Institution in which Death occurred			
	Poor Law Hospital	Royal Halifax Infirmary	West Grove	Other Places
Brighthouse ...	15	5	...	...
Sowerby Bridge ...	19	11	...	3
Barkisland ...	2	2	...	...
Luddenden Foot ...	3	3	...	...
Hartshead ...	1	...	...	...
Elland ...	6	7	...	...
Greetland ...	3	3	...	...
Bradford ...	...	3	...	1
Hipperholme ...	2	3	...	...
Shelf ...	2	...	...	...
Stainland ...	5	2	...	...
Sowerby ...	5	3	...	...
Queensbury ...	2	...	...	2
Denholme ...	...	...	...	1
Hull ...	...	...	...	1
Walsden ...	...	1	...	...
Leeds ...	...	...	...	2
Soyland ...	1	...	...	...
Hebden Bridge ...	...	4	...	1
Alexander, Canada ...	...	...	...	1
Mytholmroyd ...	...	2	...	...
Midgley ...	...	3	...	1
Norland ...	2	...	...	...
Johannesburg, S. Africa ...	...	...	...	1
Ripponden ...	1	...	...	...
Todmorden ...	...	2	...	...
Cleethorpes ...	...	...	1	...
Malham ...	...	...	...	1
Totals ...	69	54	1	15

There also occurred 27 deaths outside the Borough among persons belonging thereto, and the following table shows where these deaths occurred.

Where Death occurred	Number
Salford	1
Bradford Royal Infirmary ...	1
West Riding Asylums ...	25
Total ...	27

After making adjustment for those persons who died in Halifax, belonging to outside districts, and for Halifax residents who died outside the Borough, the total number of deaths for the year was 1,431, of which 721 were males, and 710 females. This gives a death-rate for the year of 13·2 per 1,000, or a fall in that rate of 1·2 compared with the previous year. This is the lowest deathrate that has yet been recorded within the Borough.

It is satisfactory to note that the deathrate is gradually falling, and the following table shows the fall which has taken place during the past 11 years.

Period	Deathrate
1900	18·1
1901	16·2
1902	15·4
1903	14·9
1904	15·3
1905	15·0
1906	15·5
1907	14·3
1908	14·5
1909	14·4
1910	13·2

On referring to the above table it will be seen that the deathrate for 1910 was 4·9 per 1,000 below that of 1900.

I am doubtful if many who read this Report fully realise what this saving of life means. To put it in another way it means that had the deathrate for the past year been the same, viz., 18·1 per 1,000, as was the case in the year 1900, 529 more deaths would have occurred within the Borough than actually took place.

The following were the deathrates per 1,000 for England and Wales during 1910.

England and Wales	...	13·4
77 Great Towns	...	13·4
156 Smaller Towns	...	12·4
England and Wales, less the 213 Towns	...	13·6

It will be observed that the deathrate of Halifax is below the average of the 77 great towns, but 32 of these had a lower deathrate than Halifax, of these however 17 have a smaller population.

The other Yorkshire great towns had deathrates as follows:—Leeds, 13·7; Sheffield, 13·4; Bradford, 14·0; Hull, 15·2; Huddersfield, 16·6; York, 11·8; and Rotherham, 13·6 per 1,000 respectively.

In the following table the average deathrate of England and Wales for the undermentioned periods is compared with that of Halifax.

Period	Deathrates	
	Halifax	England and Wales
1876-80	23·5	20·9
1881-5	21·1	19·4
1886-90	21·2	18·9
1891-5	17·9	18·7
1896-00	17·5	17·7
1901-5	15·3	16·0
1906-10	14·3	14·6

The ward deathrates vary considerably, viz. from 8·8 in Skircoat, to 18·4 per 1000 in North Ward. This variation is shown in the following table, which also gives the density of population in the various wards.

WARDS	Population	Acreage	Persons per Acre	Total Deaths	Death- rate per 1000
Ovenden	7490	531	14·1	116	15·4
Akroydon	6800	582	11·6	82	12·0
North	7500	168	44·6	138	18·4
Central	7325	82	89·3	107	14·6
West	8580	86	99·7	127	14·8
South	7500	296	25·3	110	14·6
East	6500	191	34·0	137	21·0
Southowram ...	7400	777	9·5	102	13·7
Skircoat	11265	513	21·9	100	8·8
Copley	3290	532	6·1	39	11·8
Pellon	9500	241	39·4	113	11·8
Kingston	11130	238	46·7	109	9·7
Illingworth ...	7550	4504	1·6	82	10·8
Northowram ...	3400	1555	2·1	41	12·0
Warley	2970	3354	·8	28	9·4
Totals	108200	13650	7·9	1431	13·2

It is not of great value to compare the ward death-rates in any particular year, but a comparison extending over a period of five years is of greater importance in this respect. The following table serves to compare the average deathrate of each ward during the past five years.

WARDS	DEATH-RATES					
	1906	1907	1908	1909	1910	Average
Ovenden ...	14·9	12·0	15·1	14·6	15·4	14·4
Akroydon ...	14·7	16·2	15·8	16·9	12·0	15·1
North ...	17·1	13·8	20·5	18·1	18·4	17·5
Central ...	17·6	17·8	15·9	17·8	14·6	16·7
West ...	14·5	14·4	16·7	15·4	14·8	15·1
South ...	14·0	14·9	15·4	15·1	14·6	14·8
East ...	22·6	21·6	17·0	17·1	21·0	19·8
Southowram ...	16·9	15·0	15·2	13·9	13·7	14·9
Skircoat ...	15·4	10·1	11·7	10·8	8·8	11·3
Copley ...	14·0	16·6	9·0	6·5	11·8	11·5
Pellon ...	12·0	12·2	10·9	11·2	11·8	11·6
Kingston ...	12·4	12·3	12·0	13·8	9·7	12·0
Illingworth ...	15·6	13·5	13·8	14·4	10·8	13·6
Northowram ...	13·6	13·6	14·6	14·9	12·0	13·7
Warley ...	19·5	15·7	12·7	12·7	9·4	14·0

It will be observed that East Ward still has the highest average deathrate, and the fall in the deathrate of this ward, which took place during 1908, has not been maintained. nearly all the lodging houses are situated in this ward, and it is quite possible that the deaths which occur in connection therewith, may to some extent help to swell its deathrate.

Skircoat has the lowest average deathrate of 11·3 per 1000, followed very closely by Copley and Pellon.

The following table shows the total number of deaths of each sex which occurred in the Borough, the total age lived, and the average age at death during the past 15 years.

MALES				FEMALES			
	Deaths	Total Years	Average Ages		Deaths	Total Years	Average Ages
0-1	88	88	...	0-1	78	78	...
1-5	63	142	2·2	1-5	43	94	2·1
5-15	28	255	9·1	5-15	22	211	9·5
15-25	31	626	20·1	15-25	29	578	19·9
25-65	339	16916	49·9	25-65	294	14441	49·1
65 and upwards	172	12511	72·7	65 and upwards	244	18103	74·1
Total... 1910.	721	30538	42·3	Total... 1910.	710	33505	47·1
1909	Average		42·0	1909	Average		47·3
1908	,,		40·6	1908	,,		44·8
1907	,,		41·4	1907	,,		47·8
1906	,,		39·0	1906	,,		44·9
1905	,,		38·6	1905	,,		44·1
1904	,,		37·5	1904	,,		41·2
1903	,,		40·0	1903	,,		43·3
1902	,,		36·6	1902	,,		40·2
1901	,,		36·2	1901	,,		40·1
1900	,,		38·3	1900	,,		41·2
1899	,,		35·1	1899	,,		38·4
1898	,,		34·4	1898	,,		38·2
1897	,,		35·3	1897	,,		37·9
1896	,,		35·5	1896	,,		38·4

Zymotic Deathrate.

During the year the seven principal Zymotic diseases accounted for 76 deaths, against 84 during the previous year. This gives a deathrate of $\cdot 70$ against $\cdot 77$ per 1000 during 1909.

A slight decrease in the Zymotic deathrate like the above, is so far satisfactory, but lower deathrates were recorded during the years 1903 and 1907, that for 1903 being the lowest on record. Four of the 33 great towns of England had a lower Zymotic deathrate than Halifax, viz.:—Bristol, $\cdot 59$; Derby, $\cdot 57$; Norwich, $\cdot 69$; and Leicester, $\cdot 68$.

The Zymotic deathrates of the other Yorkshire great towns were as follows:—Leeds, 1 \cdot 28; Sheffield, 1 \cdot 50; Bradford, 1 \cdot 25; Huddersfield, 1 \cdot 13; Hull, 1 \cdot 76; York, $\cdot 71$; and Rotherham, 1 \cdot 52 per 1,000 respectively.

It will be observed therefore that Halifax had a lower Zymotic deathrate than any of the other Yorkshire great towns.

The deathrate from the principal Zymotic diseases per 1,000 living during 1910 in England and Wales, were as follows.

	DEATHRATE FROM							
	Small-pox	Measles	Scarlet Fever	Diphtheria	Whooping Cough	Fever	Diarrhoea	Zymotic Death-rate
England and Wales...	0 \cdot 00	0 23	0 \cdot 06	0 \cdot 12	0 \cdot 24	0 \cdot 05	0 \cdot 29	0 \cdot 99
77 Great Towns ...	0 \cdot 00	0 \cdot 31	0 \cdot 08	0 \cdot 12	0 \cdot 29	0 \cdot 05	0 \cdot 38	1 \cdot 23
136 Smaller Towns ...	0 \cdot 00	0 \cdot 16	0 \cdot 06	0 \cdot 11	0 \cdot 24	0 \cdot 05	0 \cdot 26	0 \cdot 88
England and Wales, less the 213 towns...	0 \cdot 00	0 15	0 \cdot 05	0 \cdot 12	0 \cdot 17	0 \cdot 05	0 \cdot 20	0 \cdot 74
HALIFAX ...	0 \cdot 00	0 \cdot 12	0 03	0 \cdot 21	0 \cdot 12	0 \cdot 08	0 \cdot 11	0 \cdot 70

The above table shows that the Zymotic deathrate of the Borough compares very favourably with the average of that of the country generally.

The following table serves to compare the average Zymotic deathrate of the 33 great towns with that of Halifax.

	33 Great Towns	Halifax
Seven Zymotic Diseases ...	1·26	·70
Smallpox	·001	·00
Measles	·27	·12
Scarlet Fever	·08	·03
Whooping Cough	·27	·12
Typhoid Fever	·05	·08
Diarrhoea	·43	·11
Diphtheria	·13	·21

The following table gives the number of Zymotic deaths, and the deathrate for each ward during the year under review.

WARDS	Small-pox	Measles	Scarlet Fever	Diphtheria	Whooping Cough	Fever	Diarrhoea	Zymotic Death-rate per 1000
Ovenden	1	—	10	1	1	2	2·1
Akroydon	2	...	1	...	0·4
North	4	...	...	2	...	5	1·4
Central	2	...	2	1	2	1	1·0
West	1	...	1	2	...	...	0·4
South	1	1	...	1	0·4
East	1	...	1	2	...	3	1·0
Southowram	1	1	...	2	1	...	0·6
Skircoat	2	...	...	...	0·1
Copley	1	2	1	...	...	1·2
Pellon	1	...	1	1	1	...	0·4
Kingston	1	1	1	3	...	0·5
Illingworth	0·0
Northowram	3	...	...	...	...	...	0·8
Warley	0·0
Totals	14	4	23	14	9	12	avg 0·7

It will be observed that Ovenden had the highest Zymotic deathrate, while no deaths from infectious diseases occurred during the year in Illingworth and Warley Wards.

The number of deaths from Diphtheria account for the high Zymotic deathrate in Ovenden Ward.

The following table gives the Zymotic deathrate of the various wards during the past five years, together with the average for each ward.

WARDS	ZYMOTIC DEATHRATE					
	1906	1907	1908	1909	1910	Average
Ovenden ...	1·9	0·5	0·8	0·6	2·1	1·1
Akroydon ...	1·6	1·3	1·9	2·6	0·4	1·5
North ...	1·3	1·1	3·0	1·6	1·4	1·6
Central ...	1·1	0·7	0·4	0·4	1·0	0·7
West ...	0·4	0·4	1·2	0·8	0·4	0·6
South ...	1·0	0·7	0·1	0·1	0·4	0·4
East ...	1·5	0·5	1·7	0·8	1·0	1·1
Southowram ...	3·0	0·3	1·9	1·2	0·6	1·4
Skircoat ...	0·9	0·0	0·9	0·5	0·1	0·3
Copley ...	1·6	0·6	1·5	0·0	1·2	0·9
Pellon ...	0·9	0·7	0·8	0·2	0·4	0·6
Kingston ...	1·1	0·4	0·2	0·6	0·5	0·5
Illingworth ...	0·8	0·9	0·7	0·4	0·0	0·5
Northowram ...	1·5	0·6	0·2	0·2	0·8	0·6
Warley ...	1·7	0·0	0·3	0·6	0·0	0·5

Skircoat has the lowest average Zymotic deathrate. This is invariably the case, while North Ward usually has the highest.

There has been a marked fall in the average Zymotic deathrate of the Borough, as the following table will show.

Period	Deathrate
1877-81	2·50
1882-6	1·55
1887-91	1·43
1892-6	1·33
1897-01	1·40
1902-6	1·02
1907-10	·77

The above table shows that the average Zymotic deathrate to-day is less than one-third what it was 30 years ago, and this diminished fatality from infectious diseases alone, means an annual saving of 186 lives.

Infantile Mortality.

The attention which has been directed to the above matter, and the extra work which has been carried out during recent years in connection therewith, continues to bear fruit, for during the year under review the deaths of infants under one year of age numbered only 166 against 183 during the previous year, and this notwithstanding the fact that a larger number of children were born than during 1909.

The above number of deaths corresponds to an infant mortality for the year of 89 deaths per 1,000 births, against 99 for the previous year. This is the lowest infant deathrate that has ever been recorded in the Borough.

While this must be considered highly satisfactory, there is still room for improvement. That it is possible to secure a further diminution in this deathrate is evident from the fact that the average rate for five years in wards like Pellon and Skircoat are only 64 and 60 respectively per 1,000 born, compared with East, Central, and North, which show an average of 191, 148, and 133 respectively.

The Lady Health Visitor, and the Lady Visitors connected with the Public Health Association, are now especially directing their attention to the latter wards, and it is hoped that their efforts in this direction will lead to an improvement in the present state of matters.

The following table gives the number of births, birthrates, the number of deaths of infants, and the mortality per 1,000 births, for each Ward of the Borough.

WARDS	Number of Births	Birthrates	Number of Deaths under 1 year	Mortality pe 1000 Births
Ovenden ...	139	18·5	8	57
Akroydon ...	126	18·5	5	39
North ...	181	24·1	27	149
Central ...	152	20·7	17	111
West ...	158	18·4	14	88
South ...	92	12·2	5	54
East ...	86	13·2	19	220
Southowram ...	185	25·0	19	102
Skircoat ...	196	17·3	7	35
Copley ...	43	13·0	4	93
Pellon ...	146	15·3	8	54
Kingston ...	143	12·8	16	111
Illingworth ...	100	13·2	5	50
Northowram ...	68	20·0	4	58
Warley ...	45	15·1	8	177
Totals ...	1860	17·1	166	89

The following table shows the causes of deaths of infants under one year of age for the year under review.

CAUSE OF DEATH.					Under 1 Week	-2 Weeks	2-3 Weeks	3-4 Weeks	
All Causes.	{	Certified ... ..	...	...	48	13	7	10
		Uncertified ... ..	...	...	5			
Common Infectious Diseases.	{	Small-pox ... ..	...	...	...	...	...	...
		Chicken-pox ... ..	...	...	...	...	...	...
		Measles... ..	...	...	...	...	...	...
		Scarlet Fever ... ..	...	...	...	...	...	...
		Diphtheria (including Membranous Croup) ... ..	...	...	...	...	...	...
Diarrhœal Diseases.	{	Whooping Cough ... ..	...	...	...	...	...	...
		Diarrhœa, all forms ... ..	...	...	...	1	...	...
		Enteritis, Muco-enteritis, Gastro Enteritis ... ..	...	...	...	...	1	...
Wasting Diseases.	{	Gastritis, Gastro-intestinal Catarrh ... ..	...	...	...	...	...	...
		Premature Birth ... ..	...	...	33	6	2	3
		Congenital Defects ... ..	...	...	6	1	...	2
Tuberculous Diseases.	{	Injury at Birth... ..	...	...	...	...	...	...
		Want of Breast-milk, Starvation...
		Atrophy, Debility, Marasmus ... ..	...	...	5	1	3	4
Other Causes.	{	Tuberculous Meningitis ... ..	...	...	...	...	...	...
		Tuberculous Peritonitis: Tabes Mesenterica
		Other Tuberculous Diseases
Other Causes.	{	Erysipelas
		Syphilis
		Rickets...
		Meningitis (<i>not Tuberculous</i>)
		Convulsions	1	1
		Bronchitis	1
		Laryngitis
		Pneumonia
Other causes	{	Suffocation, overlying ... ..	...	...	...	...	...	...
		Other causes ... ..	...	...	8	3	1	...
					53	13	7	10	

Total under 1 Month	1-2 Months	2-3 Months	3-4 Months	4-5 Months	5-6 Months	6-7 Months	7-8 Months	8-9 Months	9-10 Months	10-11 Months	11-12 Months	Total Deaths under One Year
78	8	12	7	11	7	6	8	4	7	8	5	161
5												5
...
...
...	...	...	...	...	...	...	...	1	1	...	...	2
...
...
...	...	2	...	1	...	1	...	1	1	2	...	8
1	...	...	...	1	1	...	1	...	1	...	...	5
1	...	2	1	...	...	...	...	...	...	...	...	4
...	1	1	...	...	...	...	...	...	...	1	...	3
44	1	...	...	...	...	...	...	...	...	...	...	45
9	1	...	...	...	...	...	...	...	...	...	...	10
...
...
13	2	2	1	...	1	...	...	1	...	1	...	21
...	...	...	...	...	1	...	...	...	1	2	1	5
...
...	...	1	...	...	...	1	...	...	...	...	...	2
...
...	1	...	1	2	...	...	...	...	...	...	...	4
...
...	...	...	...	...	...	...	1	...	1	...	...	2
2	...	1	1	...	...	2	...	...	...	...	...	6
1	1	...	...	...	3	1	2	...	1	...	1	10
...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	2	1	4	...	1	2	...	1	1	1	13
...	...	...	1	...	...	...	...	...	...	...	...	1
12	1	1	1	3	1	...	2	1	...	1	1	24
83	8	12	7	11	7	6	8	4	7	8	5	166

In connection with the above table it is interesting to note that the number of deaths under the heading of Atrophy, Debility, and Marasmus, is 11 less than the previous year, and that the number returned under the heading of Convulsions is 14 less.

As the above diseases have undoubted relation to the feeding of infants, it would seem that this improvement may be due to greater care being exercised in this important matter.

There were 102 illegitimate births, and 13 deaths under one year of age during the year, which gives an illegitimate infant mortality of 127 per 1,000 born.

The following table shows the causes of death of the illegitimate infants.

Disease	Age at Death	
	Under 1 year	
Atrophy	2	
Pneumonia	1	
Premature Birth ...	5	
Congenital Defects ...	1	
Gastro Enteritis ..	1	
Measles	1	
Syphilis	1	
Starvation	1	

The numbers given in the above table are too few to compare with the causes of death among the legitimate infants, but attention may be drawn to the fact

that five deaths occurred as the result of premature birth, which represents 38% of the total illegitimate deaths, while when the whole of the legitimate deaths are included, the percentage of deaths was 28% only from this cause.

It has already been pointed out that the infant mortality of the different Wards varies considerably, and the following table is included in order to show the average infant mortality, and the birthrates of each Ward during the past five year.

WARDS	Deaths under 1 Year to 1000 Births Registered						Average Birthrate during the past five years
	1906	1907	1908	1909	1910	Average	
Ovenden ...	116	87	93	106	57	91	19.5
Akroydon ...	96	161	86	120	39	100	21.5
North ...	137	102	154	127	149	133	23.7
Central ...	239	122	154	114	111	148	20.0
West ...	89	113	138	121	88	109	17.5
South ...	63	80	103	69	54	73	13.6
East ..	260	219	131	126	220	191	15.1
Southowram	130	142	95	108	102	115	22.5
Skircoat ...	80	42	80	66	35	60	17.6
Copley ...	56	103	92	57	93	80	18.3
Pellon ...	84	68	56	61	54	64	16.3
Kingston ...	62	62	81	125	111	88	15.4
Illingworth	99	82	104	87	50	84	15.6
Northowram	84	111	59	76	58	77	20.2
Warley ...	150	0	56	52	177	87	17.4

In my annual report for last year I called attention to the marked fall which had occurred during the previous two years in the infantile deathrate of East Ward. I regret that this improvement has not continued, and that during the year under review the infant mortality in this Ward was higher than that for any year since 1906.

From the above table it will be observed that East Ward shows the highest average infant mortality, viz.:—191 per 1,000 births; Central next with 148, and then North with 133.

These Wards have invariably the highest infant deathrate, and their relative positions regarding thereto have now been the same for several years.

Skircoat Ward had the lowest average infantile deathrate, showing only 60 deaths per 1,000 births. In fact, for the year under review, this Ward had the remarkably low infant deathrate of only 35 per 1,000 born.

The Lady Health Visitor, and the band of voluntary Lady Visitors, continue to do excellent work, but this will be referred to in greater detail in the report of the Lady Visitor attached hereto.

The following table shows the number of deaths which took place in the Borough from some of the chief infantile diseases, and gives the deathrates therefrom of each disease per 1,000 of the population.

DISEASES	Number of Deaths under 1 year					Rate per 1000 of Population				
	1906	1907	1908	1909	1910	1906	1907	1908	1909	1910
From all causes ...	242	195	216	183	166	2·24	1·79	2·00	1·69	1·53
Respirat'ry Diseases	39	33	36	21	23	·36	·30	·33	·19	·21
Premature Birth ...	39	33	36	37	45	·36	·30	·33	·34	·41
Diarrhoea ...	12	12	7	5	5	·11	·11	·06	·04	·04
Whooping Cough	1	6	10	6	8	·009	·07	·09	·05	·07
Convulsions ...	20	19	18	20	6	·18	·17	·16	·18	·05
Scrofula, Tuberculosis ..	8	17	4	6	7	·07	·15	·03	·05	·06
Measles ...	15	5	37	1	2	·13	·04	·34	·009	·01

The following table serves to compare the average infant mortality of England and Wales, the great towns, etc., with that of Halifax for the past two years.

	Deaths under 1 year per 1000 Births	
	1909	1910
England and Wales ...	109	106
77 Great Towns ...	118	115
136 Smaller Towns ...	111	104
England and Wales less the 213 Towns ...	98	96
HALIFAX ...	99	89

From the above table it will be observed that the infant mortality for Halifax compares very favourably

with the above. It is not only below that of the smaller towns, but is actually less than the average of rural England.

The infant mortality of the other Yorkshire great towns for 1910 was as follows:—Leeds, 132; Sheffield, 127; Bradford, 127; Hull, 135; Huddersfield, 99; York, 93; and Rotherham, 131 respectively.

The following table compares the average infant mortality in quinquennial periods, from 1875 to the present time, of the Borough, with that of England and Wales.

Period	Halifax	England and Wales
1875-9	173	145
1880-4	161	141
1885-9	158	142
1890-4	163	148
1895-9	154	157
1900-4	132	143
1905-9	109	121
1910	89	106

The following table shows the average infant mortality of 36 of the largest towns of the country having a population of 100,000 and upwards, and it will be seen that only one has a lower average than that of Halifax, viz., Croydon.

36 LARGE TOWNS	Deaths under 1 year to 1,000 Births Registered.					
	1906	1907	1908	1909	1910	Average
Burnley	213	158	200	156	168	179
Preston	202	158	154	136	158	161
Middlesbrough...	170	158	159	158	144	157
Rhondda	173	162	183	129	136	156
Stockport	186	159	167	132	137	156
Nottingham	171	165	145	150	128	151
Liverpool	172	144	141	144	140	148
Manchester	167	146	151	134	131	145
Birmingham	167	147	145	134	130	144
Salford	160	140	153	141	130	144
Blackburn	155	153	150	126	136	144
Gateshead	162	136	149	112	151	142
Oldham	145	144	160	119	127	139
Sheffield	158	145	140	118	127	137
Bolton	140	146	149	128	117	136
Leicester	168	131	131	127	126	136
Hull	158	127	145	114	135	135
Sunderland	139	130	146	135	129	135
Leeds	150	130	138	122	132	134
South Shields	150	133	134	137	113	133
Bradford	151	124	143	116	127	132
Newcastle	151	123	136	119	121	130
Birkenhead	151	110	135	123	135	130
Wolverhampton...	139	130	132	138	107	129
Plymouth	152	110	129	131	114	127
Norwich	172	125	115	119	103	126
Cardiff	138	131	125	103	111	121
London	132	115	113	107	102	113
Derby	115	121	112	123	85	111
Portsmouth	129	123	98	96	104	110
Bristol	126	100	126	100	90	108
Huddersfield	135	97	111	95	99	107
Brighton	110	113	104	96	109	106
Southampton	113	108	113	106	79	103
Halifax	116	102	101	99	89	101
Croydon	125	94	99	80	88	97

Comparison of Ward Deathrates.

The following table compares the undermentioned deathrates of the different Wards of the Borough, for the year 1910.

WARDS	General Deathrates	Zymotic Deathrates	Respiratory Deathrates	Phthisis Deathrates	Infantile Mortality
Ovenden ...	15·4	2·1	2·8	·6	57
Akroydon ...	12·0	·4	1·7	1·1	39
North ...	18·4	1·4	3·0	1·0	149
Central ...	14·6	1·0	2·8	1·5	111
West ...	14·8	·4	1·8	1·6	88
South ...	14·6	·4	2·9	·5	54
East ...	21·0	1·0	4·6	1·3	220
Southowram ...	13·7	·6	2·5	1·2	102
Skircoat ...	8·8	·1	1·3	·6	35
Copley ...	11·8	1·2	2·7	·6	93
Pellon ...	11·8	·4	1·7	·8	54
Kingston ...	9·7	·5	1·3	·4	111
Illingworth ...	10·8	·0	1·9	1·1	50
Northowram ...	12·0	·8	·8	1·1	58
Warley ...	9·4	·0	·6	·0	177
Average ...	13·2	·7	2·2	9	89

From the above table it will be observed that East Ward had considerably the highest general deathrate, and also a very high respiratory deathrate, while Skircoat, Kingston and Warley, had remarkably low general deathrates.

The next table shows the average deathrates from the undermentioned causes for the past 10 years in each Ward.

WARDS	Average Deathrates, 10 years			
	General	Zymotic	Phthisis	Respiratory
Ovenden ...	15·0	1·1	1·0	2·3
Akroydon ...	15·4	1·2	·7	2·6
North ...	18·0	1·6	1·5	3·5
Central ...	17·2	1·1	1·3	3·1
West ...	15·2	·7	1·1	2·8
South ...	14·4	·5	·8	2·4
East ...	20·5	1·1	1·9	3·9
Southowram ...	15·3	1·4	1·1	2·7
Skircoat ...	12·9	·5	1·0	2·3
Copley ...	11·6	1·0	·9	1·9
Pellon ...	12·3	·7	·9	1·9
Kingston ...	11·6	·5	·9	2·1
Illingworth ...	14·1	·6	·9	2·5
Northowram ...	15·3	·9	1·4	2·2
Warley ...	14·7	·4	1·3	2·2

From the above table it will be observed that East Ward, as usual, has the highest average general death-rate, phthisis deathrate, and respiratory deathrate.

The average general deathrate of the whole Borough for the past 10 years was 14·8 per 1,000, consequently it will be seen that 8 Wards had a higher average rate than that of the Borough. Copley and Kingston had the lowest average rates, while the averages for Pellon and Skircoat Wards are satisfactory.

The following table serves to compare the death-rates from some of the chief diseases of the three Wards having respectively the highest and lowest deathrates during the past five years.

WARDS	Average Deathrate per 1000 for 5 years, 1906 to 1910						Total of Average
	Zymotic Diseases	Respiratory Diseases	Phthisis	Heart Diseases	Diseases Brain and Nervous System	Other Tubercular Diseases	
Copley ..	·9	1·6	·6	1·1	1·2	·1	5·5
Pellon ...	·6	1·6	·8	1·2	1·1	·2	5·5
Skircoat ...	·3	2·0	·8	1·2	1·1	·1	5·5
Average ...	·6	1·73	·73	1·16	1·13	·13	...
East ...	1·1	3·8	1·7	2·0	1·7	·3	10·6
North ...	1·6	3·4	1·5	1·4	1·5	·2	9·6
Central ...	·7	2·8	1·5	1·8	1·3	·4	8·5
Average ...	1·13	3·33	1·56	1·73	1·5	·3	...

Notification of Infectious Diseases.

The notification of certain of the Infectious Diseases has been compulsory in the Borough since the year 1882.

During the year under notice, notifiable infectious disease was less prevalent than during the previous year, there being 464 cases notified, against a total of 766 during the previous year.

The following table shows the total number of cases of each disease notified, the distribution of these cases among the wards of the Borough, and the institutions situated therein.

WARDS			Typhoid Fever	Scarlet Fever	Puerperal Fever	Diphtheria	Erysipelas	Total
Ovenden	...	...	...	21	1	47	10	79
Akroydon	...	...	1	24	...	12	1	38
North	...	...	1	15	1	2	3	22
Central	...	...	1	21	1	7	5	35
West	...	...	2	24	1	5	1	33
South	...	...	1	17	...	9	...	27
East	...	...	1	13	...	3	3	20
Southowram	...	...	7	23	...	6	3	39
Skircoat	...	..	6	14	...	13	11	44
Copley	...	...	2	8	1	10	3	24
Pellon	...	...	4	22	1	11	1	39
Kingston	...	...	2	4	...	3	7	16
Illingworth	...	...	...	6	...	2	2	10
Northowram	...	...	...	15	1	2	...	18
Warley	...	...	5	10	...	5	...	20
Total, 1910			33	237	7	137	50	464

PUBLIC INSTITUTIONS (which are included in the above).

Royal Infirmary	...	4	...	...	...	10	14
Poor Law Hospital	...	...	...	1	2	...	3
The Workhouse	...	...	1	...	...	...	1
Blue Coats School	...	...	1	...	...	...	1

Lists were sent twice weekly throughout the year to the chief Librarian, showing the names and addresses of those notified, for his information, and all library books found in infected houses were taken possession of by the Sanitary Inspectors, and disinfected before being again put into circulation.

As many of the infectious diseases tend to become more prevalent during certain periods of the year, the following table is given in order to show the number of cases notified during each month of the year under review.

MONTH			Typhoid Fever	Scarlet Fever	Puerperal Fever	Diphtheria	Erysipelas	Total
January	...	...	1	17	1	13	7	39
February	...	...	4	26	1	32	5	68
March	...	...	...	25	...	25	5	55
April	...	...	2	10	...	7	7	26
May	...	...	1	12	...	15	...	28
June	...	...	1	22	2	12	4	41
July	...	...	4	25	...	3	1	33
August	...	...	6	17	2	6	1	32
September	...	...	6	20	...	5	2	33
October	...	...	2	17	1	10	7	37
November	...	...	2	16	...	1	3	22
December	...	...	4	30	...	8	8	50
Totals	...	...	33	237	7	137	50	464

From the above table it will be observed that cases of Typhoid Fever occurred in the Borough during each month of the year except March, and that the period of greatest prevalence was during August and September.

Scarlet Fever was most prevalent during December, and Diphtheria during February.

The following table shows the number of cases of each disease notified yearly since the year 1883, when compulsory notification was put in force.

YEAR	Small-pox	Cholera	Typhus Fever	Enteric Fever	Scarlet Fever	Continued Fever	Puerperal Fever	Relapsed Fever	Diphtheria	Erysipelas	Chicken-Pox	Membranous Croup	Total	Rate percentage of population
1883	2	...	2	108	158	43	2	1	14	...	...	...	330	·43
1884	1	...	1	69	269	24	4	4	13	...	...	...	385	·50
1885	7	...	1	56	214	22	1	...	25	...	...	...	326	·42
1886	3	1	...	57	124	7	5	...	59	...	...	...	256	·32
1887	1	...	1	66	727	8	7	...	26	...	...	...	836	1·05
1888	1	...	1	36	440	16	1	...	29	...	...	...	524	·65
1889	2	...	...	94	153	18	1	3	31	...	...	...	302	37
1890	...	...	...	67	328	8	8	1	62	...	...	...	474	·58
1891	...	1	...	99	429	14	5	2	23	...	...	...	573	·68
1892	159	...	1	56	256	9	4	2	71	...	...	...	558	·66
1893	346	5	...	69	150	5	6	...	57	...	...	...	638	·69
1894	16	...	...	52	114	3	6	...	43	...	...	...	234	·25
1895	...	...	...	58	52	3	4	...	29	...	...	...	146	·15
1896	...	...	...	105	44	2	4	...	37	...	...	...	192	·20
1897	...	...	...	78	476	1	8	...	67	...	...	...	630	·66
1898	...	...	...	79	626	1	9	...	23	...	...	...	738	76
1899	...	...	...	92	762	2	3	...	58	...	...	...	917	·93
1900	2	...	5	79	330	1	4	3	41	1	...	...	466	·46
1901	3	...	...	67	736	...	1	...	61	15	...	...	883	·83
1902	1	...	...	65	452	1	3	...	37	27	...	...	586	·55
1903	130	...	...	61	320	2	1	...	50	81	328	1	974	91
1904	80	...	...	47	486	...	9	...	80	73	...	...	775	·72
1905	49	...	...	50	338	...	6	...	87	54	...	...	584	·54
1906	...	...	...	38	214	...	7	...	158	56	...	...	473	·43
1907	...	...	...	60	89	...	7	...	118	36	...	...	310	·28
1908	...	...	...	53	186	1	6	...	72	44	...	...	362	·33
1909	..	...	...	44	545	...	4	...	128	45	...	...	766	·70
1910	..	...	...	33	237	...	7	...	137	50	...	...	464	·42

From the above table it will be observed that Typhoid Fever was much less prevalent than during the previous year, in fact, fewer cases were reported during the year under review than for any year since notification became compulsory. Scarlet Fever was also much less prevalent, but Diphtheria showed a slight increase in the number of cases reported.

The following Table shows the average number of notifications of the chief notifiable diseases in each ward of the Borough during the past 10 years.

Wards	Averages, 10 years—1901 to 1910							
	Notifications					Total Average of Notifi- cations	Average Popu- lation	Average attack rate per 1000 population per annum
	Small- pox	Typhoid	Scarlet Fever	Puer- peral Fever	Diph- theria			
Ovenden ...	1·5	1·9	49·0	·2	11·6	64·2	7295	8·8
Akroydon ...	·6	3·1	25·6	·3	7·4	37·0	6646	5·5
North ...	1·6	3·8	27·7	1·0	4·7	38·8	8130	4·7
Central ...	4·4	4·2	19·2	·6	5·8	34·2	7624	4·4
West ...	2·5	4·5	23·5	·3	7·4	38·2	9061	4·2
South ...	·9	2·8	19·4	...	6·3	29·4	7604	3·8
East ...	7·6	3·6	14·5	·6	3·8	30·1	6956	4·3
Southowram ...	·7	5·2	21·8	·4	5·9	34·0	7443	4·5
Skircoat ...	1·9	7·7	33·4	·4	11·2	54·6	9942	5·4
Copley ...	·4	1·7	11·4	·1	4·2	17·8	3040	5·8
Pellon ...	1·0	3·1	26·0	·5	9·2	39·8	9519	4·1
Kingston ...	·6	3·3	42·3	·4	6·0	52·6	10586	4·9
Illingworth ...	1·1	3·6	25·6	·2	4·6	35·1	7199	4·8
Northowram ...	...	1·9	12·2	...	1·7	15·8	3505	4·7
Warley ..	1·5	1·4	8·7	·1	3·1	14·8	2886	5·1

Causes of Death.

In the following table the causes of death in the Borough of persons belonging thereto during 1910 are classified.

CAUSES OF DEATH						Number
Whooping Cough ...	...	...	...	...	...	14
Small-pox ...	...	...	...	...	...	0
Measles ...	...	...	...	...	...	14
Scarlet Fever ...	...	...	...	...	...	4
Diphtheria and Membranous Croup	...	...	...	...	...	23
Diarrhœa ...	...	...	...	...	...	12
Typhoid Fever ...	...	...	...	...	...	9
Epidemic Influenza	...	...	...	...	...	8
Croup ...	...	...	...	...	...	1
Enteritis ...	...	...	...	...	...	8
Puerperal Fever ...	...	...	...	...	...	2
Erysipelas ...	...	...	...	...	...	3
Other Septic Diseases	...	...	...	...	...	8
Phthisis ...	...	...	...	...	...	103
Other Tuberculous Diseases	...	...	...	...	...	19
Cancer, Malignant Diseases	...	...	...	...	...	102
Bronchitis ...	...	...	...	...	...	118
Pneumonia ...	...	...	...	...	...	121
Pleurisy ...	...	...	...	...	...	1
Other Diseases, Respiratory Organs	...	...	...	...	...	14
Alcoholism, Cirrhosis of Liver	...	...	...	...	...	9
Venereal Diseases ...	...	...	...	...	...	0
Diseases and Accidents of Parturition	...	...	...	...	...	12
Heart Diseases	...	...	...	...	...	157
Other Diseases, Circulatory System	...	...	...	...	...	21
Accidents ...	...	...	...	...	...	31
Suicides ...	...	...	...	...	...	14
Murder ...	...	...	...	...	...	0
Diseases of Brain and Nervous System	...	...	...	...	...	145
Diseases of Digestive System...	...	...	...	...	...	67
Diseases of Urinary System	...	...	...	...	...	58
Old Age ...	...	...	...	...	...	124
Acute Rheumatism	...	...	...	...	...	3
Rheumatoid Arthritis	...	...	...	...	...	3
Constitutional Diseases	...	...	...	...	...	1
Starvation ...	...	...	...	...	...	1
Diseases of Reproductive System	...	...	...	...	...	0
Diseases of Locomotive System	...	...	...	...	...	0
Dentition ...	...	...	...	...	...	3
Premature Birth ...	...	...	...	...	...	45
Congenital Defects	...	...	...	...	...	10
Convulsions ...	...	...	...	...	...	8
Chicken Pox ...	...	...	...	...	...	0
Gastritis, Gastro Intestinal Catarrh	...	...	...	...	...	6
Injury at Birth ...	...	...	...	...	...	0
Want of Breast Milk	...	...	...	...	...	0
Atrophy, Debility, &c.	...	...	...	...	...	28
Tubercular Meningitis	...	...	...	...	...	16
Tuberculous Peritonitis, Tabes Mesenterica	...	...	...	...	...	4
Syphilis ...	...	...	...	...	...	4
Rickets...	...	...	...	...	...	1
Meningitis (not Tuberculous)	...	...	...	...	...	14
Laryngitis ...	...	...	...	...	...	3
Suffocation, Overlaying	...	...	...	...	...	1
Diabetes Mellitus ...	...	...	...	...	...	19
Diseases of Bone ...	...	...	...	...	...	1
Diseases, Organs of Special Sense	...	...	...	...	...	5
Lead Poisoning ...	...	...	...	...	...	1
Other Causes ...	...	...	...	...	...	32
All Causes	...	...	...	...	...	1,431

Smallpox.

The Borough continued free from this disease throughout the year.

Scarlet Fever.

For the two previous years I had to report an increased prevalence of this disease within the Borough, but during the year under review, it was much less prevalent, 237 having been notified against 545 during 1909.

The following table shows the number of cases notified, and the number of deaths in age periods during the year.

Age Period...	0-1	1-5	5-15	15-25	25-65	65 upwards.
Cases ...	—	49	145	36	7	—
Deaths ...	—	3	1	—	—	—

The above table shows that the incidence and mortality from Scarlet Fever below the age of one year is practically a negligible quantity, and that the disease is most prevalent between the ages of 5 and 15 years, and that the mortality is greatest between the ages 1 and 5. This shows the importance of protecting children under 5 from contracting the disease, because each year after that age, renders the child less likely to die therefrom, should he fall a victim thereto. This is more especially the case now that the disease appears to be of a much milder type than obtained 30 years ago.

The following table shows the average number of cases notified, and the average attack rate in quinquennial periods since the year 1885.

Period	Average No. of Cases of Scarlet Fever per annum notified	Average Population	Average attack rate per 1000 population	Average case Mortality per cent. attacked
1885-9	331	79,207	4.1	6.1
1890-4	255	86,808	2.9	5.8
1895-9	392	95,755	4.0	3.4
1900-4	465	105,211	4.4	3.4
1905-9	274	107,850	2.5	2.9
1910	237	108,200	2.1	1.6

From the above table it will be observed that the attack rate per 1,000 of the population from this disease had remained about the same up to the period ending 1904, while since that date there has been an improvement in this direction. It is hoped that this favourable result will continue in the future.

The following table gives the number of cases notified during each month of the year.

Scarlet Fever	January	February	March	April	May	June	July	August	September	October	November	December	Total
Cases notified...	17	26	25	10	12	22	25	17	20	17	16	30	237

Of the above 237 cases, 4 died, which gives a deathrate of .03, and a case mortality of 1.6 per cent. of those notified, against a deathrate of .16 and a case mortality of 3 per cent. during the previous year.

Fever.

No case of Typhus Fever has occurred within the Borough since the year 1900, and no case of continued Fever has been notified since the year 1903, consequently all the cases to be included under the above heading were of Enteric Fever.

There were 33 cases of Typhoid reported against a total of 44 during the previous year. This is the smallest number that has been notified during one year since notification became compulsory.

In the months of August and September the disease was most prevalent, six cases being notified during each of those months, and March was the only month during the year when the Borough was free therefrom.

The following table gives the sanitary conditions connected therewith, and the probable or assigned causes of the notified cases of Typhoid Fever.

Disease	Number of Cases reported	Drainage		Ventilation		Old Middens	Goux Closets	Water Closets	Probable or assigned cause			
		Good	Bad	Good	Bad				No trace	From a previous case in same house	From a cold	Contracted away from home
Typhoid Fever...	33	31	2	33	...	2	26	5	28	1	3	1

No case was traced to shell fish as a cause during the year, and as a result of the scare created two years

ago much less quantity of shell fish is now consumed by the public than formerly was the case.

The following table gives the number of cases notified since the year 1899, and the number of deaths each year since that date.

Year	Number of Cases Reported	Number of Deaths
1899	92	22
1900	79	20
1901	67	15
1902	65	14
1903	61	11
1904	47	10
1905	50	9
1906	38	4
1907	60	9
1908	53	10
1909	44	8
1910	33	9

Of the 33 cases reported during the year nine died, giving a deathrate of $\cdot 08$, and a case mortality of 27 per cent., against a deathrate of $\cdot 07$ per 1,000, and a case mortality of 18 per cent. during the previous year.

Diphtheria.

I regret that I cannot report so favourably regarding diphtheria as is the case with reference to typhoid fever, because although there was a marked diminution in the prevalence of this disease within the Borough during the year 1908, unfortunately the number of cases have

increased very considerably during the past two years, so much so, that the number notified during the year under review is greater than any year except 1906, since notification became compulsory.

This disease has become more prevalent in large towns during recent years, therefore Halifax is not alone in this respect.

The disease was present in the Borough more or less throughout the year, and in every Ward cases were notified. The period of greatest prevalence however was during the months of February and March.

Ovenden Ward suffered most, no less than 47 cases being reported therein. This resulted from the fact that an outbreak occurred at Lee Mount School, situated within this Ward, and which was responsible for 22 cases of the disease.

The number of cases of this disease reported within the Borough had remained pretty constant since notification was enforced up to the year 1903. It became more prevalent however during the year 1904, and has remained so ever since, as the following table will show, which gives the number of cases reported, and the number of deaths from the disease each year since the year 1904.

Year	Number of Cases Reported	Number of Deaths
1904	80	17
1905	87	27
1906	158	42
1907	118	28
1908	72	11
1909	128	27
1910	137	23

As above stated, Ovenden Ward was most affected, nearly one-third of the cases having occurred therein. Next to Ovenden the other Wards chiefly affected were Akroydon, Skircoat, Pellon and Kingston.

The following table gives the sanitary conditions connected with, and the probable or assigned causes of the notified cases of diphtheria.

Disease	Number of Cases Reported	Drainage			Ventilati'n		Old Middens	Goux Closets	Water Closets	No Trace	Probable or assigned cause						
		Good	Bad	None	Good	Bad					From other cases in the neighbourhood	From a cold	From bad drains	From previous case in same house	Contracted away from home	Contracted at school	Contracted at workshop
Diphtheria	137	112	23	2	137	...	3	119	15	93	6	15	3	11	1	7	1

Of the 137 cases reported 23 died, giving a death-rate of $\cdot 21$, and a case mortality of 16 per cent., against a deathrate of $\cdot 25$ per 1,000, and a case mortality of 21 per cent. during the previous year. Thus, both the deathrate and case mortality showed a decrease for the year.

The following table gives the deathrate per 1,000, and case mortality from the disease during the past six years.

Year	Deathrate per 1000	Mortality per cent
1905	$\cdot 25$	31
1906	$\cdot 38$	26
1907	$\cdot 25$	23
1908	$\cdot 10$	15
1909	$\cdot 25$	21
1910	$\cdot 21$	16

It will be observed from the above table that there has been a slight improvement in the deathrate, and that there has been a satisfactory fall in the case mortality.

Erysipelas.

There were 50 cases of this disease reported, and three deaths occurred therefrom, against 45 notified with no deaths during the previous year.

Measles.

The Borough was practically free from this disease during the first quarter of the year under review, but during April a few cases cropped up, and the disease again subsided early in May, June being practically free therefrom. The disease however broke out again early in July, during which month it assumed its greatest prevalence, after which it gradually subsided, and by the middle of November the disease had ceased to spread.

The disease caused 14 deaths, against four during the previous year, and all the above deaths were of children under five years of age.

The deathrate for the year of this disease was $\cdot 12$ per 1,000, against $\cdot 03$ during the previous year.

Whooping Cough.

This disease was present in the Borough from March to September, but at no time did it assume a serious epidemic form. The period of its maximum prevalence was during the month of July, and during

the last quarter of the year the Borough was practically free from the disease.

The disease caused 14 deaths, against 17 during the previous year. All of the above deaths were of children under the age of five years.

Whooping Cough, like Measles, is chiefly fatal to those attacked under that age period, hence the importance of protecting the very young from exposure to the infection of this complaint. Parents are not sufficiently careful in this respect. I am sure if greater care were exercised in preventing those under the age of five from being brought into contact with this disease, the deathrate therefrom would be materially diminished.

The above deaths give a deathrate for the year of $\cdot 12$ per 1,000, against $\cdot 15$ during the previous year.

Diarrhoea.

There were 12 deaths registered in the Borough during the year from those causes which are classified under diarrhoea, against 10 during the previous year.

The highest point which the 4' earth thermometer reached was from August 15th to the 31st, when it stood at $54\cdot 5^{\circ}$.

The maximum prevalence of this disease however did not occur till the latter half of October, when six deaths occurred therefrom.

The following table serves to compare the average Diarrhoea deathrate of Halifax with that of England and Wales, and other towns.

	Deathrate per 1,000
England and Wales	0·29
77 Great Towns	0·38
136 Smaller Towns	0·26
England and Wales, less the 213 Towns ...	0·20
Halifax	0·11

It will be observed from the above table that Halifax occupies a very favourable position in regard to the prevalence of this disease.

The above 12 deaths give a deathrate of ·11, against a deathrate of ·09 for the previous year.

The deathrates from this cause of the other Yorkshire great towns for the year under notice were as follows:—Leeds, ·38; Sheffield, ·66; Bradford, ·33; Hull, ·92; Huddersfield, ·31; York, ·43; and Rotherham, ·19 per 1,000 respectively.

Influenza.

This disease appears to have been less prevalent in the Borough than during the previous year, as 8 deaths were registered therefrom, against 21 during 1909.

The majority of the deaths occurred during the months of January and December.

Respiratory Diseases.

The diseases included under the above heading are Bronchitis, Pneumonia, and Pleurisy, and the number of deaths registered therefrom was 240, against 290 during the previous year.

The above 240 deaths included 118 from Bronchitis, 121 from Pneumonia, and 1 from Pleurisy, and give a deathrate of 2·2 per 1·000, against 2·6 during the previous year.

The Respiratory deathrates for the previous 10 years were 2·6, 2·3, 2·5, 2·6, 2·6, 2·6, 2·8, 3·1, 3·0, and 3·7 respectively.

From the above table it will be observed that the Respiratory deathrate of the Borough has been gradually diminishing, and that the deathrate for the year under review is the lowest on record.

There were rather more deaths from Respiratory diseases among children under 5 years of age than during the previous year, the number being 51, against 49 in the latter year.

The following table gives the number of deaths from Respiratory disease during each month of the year under notice, and the eight previous years; also the average of those years.

Deaths from Respiratory Diseases	January	February	March	April	May	June	July	August	September	October	November	December	Total
1910	27	17	22	27	28	16	15	18	15	15	12	28	240
1909	29	30	58	23	25	18	7	6	8	16	24	46	290
1908	26	31	42	20	18	14	7	15	6	12	24	37	252
1907	27	38	25	36	21	12	13	14	8	25	33	29	281
1906	32	28	27	29	29	14	11	18	10	30	28	33	289
1905	48	26	31	24	24	16	7	8	9	29	31	33	286
1904	38	28	25	28	18	20	13	10	13	23	26	43	285
1903	39	29	30	34	29	18	16	15	14	21	24	40	309
1902	35	46	38	30	22	23	21	16	15	15	30	37	328
Average ...	33	30	33	27	23	16	12	13	10	20	25	36	...

The above table shows that diseases of the Respiratory organs are most fatal during the month of December, and that next to this month, during the first quarter of the year.

Phthisis.

There were 103 deaths from consumption of the lungs registered during the year, against 120 during the previous year.

This gives a deathrate of $\cdot 9$ per 1,000, against 1.1 for the previous year, which is the lowest deathrate from this disease on record.

Even though that be so, this terrible disease claims more victims each year than all the infectious diseases put together.

The following table shows the deathrate from this disease during the past 10 years.

Year	Deathrate	Average
1901	1.38	1.23
1902	1.02	
1903	1.25	
1904	1.25	
1905	1.25	
1906	1.12	1.11
1907	1.1	
1908	1.35	
1909	1.1	
1910	$\cdot 9$	

It will be observed from the above table that the deathrate from this disease is gradually though slowly falling.

This decline in the Phthisis deathrate of Halifax is more marked if the figures be shown in decennial periods for the past 30 years, as in the following table.

				Average Deathrate from Phthisis
Ten Years	-	1881-1890	...	2.00
Ten Years	-	1891-1900	...	1.50
Ten Years	-	1901-1910	...	1.17

The above table shows that the average deathrate from this disease has fallen nearly 100 per cent. in Halifax during the past 30 years.

With a view to further decreasing the prevalence of this disease, the Corporation are seeking powers to make this disease compulsorily notifiable. The Health Committee has also under consideration the provision of a sanatorium for the treatment of this disease, and as a means of teaching persons suffering therefrom how to deal with their sputum, and otherwise treat themselves so as to prevent them from being a danger to the public, and obviate the spread of this terrible disease.

I have also given public lectures during the past year on this subject, and leaflets have been distributed and pocket spittoons supplied free to those who applied for the same.

Other forms of tubercular disease caused 39 deaths during the year, which added to the above make a total of 142 deaths due to the various forms of tubercle.

This gives a total deathrate from all tubercular diseases of 1.3 per 1,000, against 1.5 during the previous year.

The causes of death from tubercular disease other than Phthisis were as follows.

Tubercular Meningitis	...	...	16
Tuberculous Peritonitis			
Tabes Mesenterica	...	...	4
Other Tubercular Diseases		...	19

Under the Regulations of the Local Government Board, which makes the occurrence of Phthisis in a poor person compulsorily notifiable to the Medical Officer of Health, 159 notifications were received during the year.

Notifications were received in respect of 91 persons, of which number 64 referred to primary cases, and 27 to cases which had been reported during the previous year. The remainder were duplicates.

The following table shows the number reported more than once, and the number of duplicate notifications received in connection therewith.

Number of Primary Cases	37	20	5	2	...	...	64
Cases reported during 1910, which had been notified during the previous year	11	6	7	1	1	1	27
Total Cases notified...	48	26	12	3	1	1	91
Number of times each case was notified during 1910	1	2	3	4	5	6	...
Number of notifications received	48	52	36	12	5	6	159

As far as practicable enquiries were made into the family history of persons reported under the above Regulations, and it was found that a previous case had occurred in the same house in four instances. In six families previous cases had occurred, four of which had two previous cases, another one case, while in the sixth the number was not stated.

Disinfection was carried out after removal to Hospital, or after death, by our staff in 25 instances.

A large proportion of the cases reported under these Regulations are either vagrants admitted to the Poor Law Hospital from one or other of the Common Lodging Houses, or paupers from the Workhouse.

Enquiries were also made in connection with deaths that are registered during the year from this disease, and in 11 houses a previous case or cases had occurred.

In 13 families a previous case or cases had occurred, viz.:—in six families one case, in three families two cases, and in one family three cases.

In three families no definite information was obtainable beyond the fact that there was a history of the disease.

In connection with the above disinfection was carried out in 47 instances, while in nine cases it was refused.

In this way a total of 56 cases were investigated.

Anthrax.

On November 7th last a case of Anthrax was reported to me from the Infirmary.

It appears that C.L., a small local farmer, had a cow which was taken ill on October 27th, and while "in extremis" was killed by a local butcher.

C.L. assisted in dressing the cow and dealing with the carcase, and evidently infected himself therefrom, for he was found on examination to have no less than three malignant pustules on his arms and face.

The matter was fully enquired into and was taken up by the police, who summoned C.L. before the magistrates for failing to notify the existence of Anthrax upon his premises. Defendant was fined 40/-, with costs amounting to 36/6.

Fortunately he recovered from the disease.

Cancer.

The various forms of malignant disease included under the above heading caused 102 deaths, against 89 during the previous year.

This gives a deathrate of .94 per 1,000, against .82 for 1909.

Of the 102 deaths from malignant disease 67 were females and 35 were males.

The following table shows the organs affected in those who died from this disease.

Mouth	Larynx	Lung	Oesophagus	Stomach	Liver	Gall Bladder	Spleen	Pancreas	Bowel	Rectum	Uterus	Ovaries	Penis	Bladder	Kidneys	Breast	Other Situations	TOTAL
3	3	2	4	23	12	3	1	2	8	8	14	3	1	2	1	9	3	102

The following table shows the deathrate from malignant disease in Halifax since the year 18

YEAR	1892	1893	1894	1895	1896	1897	1898	1899	1900
Deathrate ...	·8	·7	·8	·8	1·1	·6	·6	·7	·7

YEAR	1902	1903	1904	1905	1906	1907	1908	1909	1910
Deathrate ...	·8	1·0	·8	·9	·9	1·0	1·0	·8	·9

It would appear that malignant disease is on the increase in some parts of the country. The deathrate therefrom in Halifax has remained pretty constant during the past 18 years.

Inquests and Uncertified Deaths.

The Coroner held 116 inquests during the year 1910 which included 13 on persons not belonging to the Borough.

The 103 deaths certified by the Coroner as inquests form 7·1 per cent. of the total deaths of the Borough. There were 12 deaths which were neither certified by a Medical Practitioner nor the Coroner which corresponds to ·8 per cent. of the total deaths.

YEARS	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
Percentage certified by Coroner	2·6	2·9	3·1	2·8	3·5	4·7	5·1	6·0	6·7	7·1
Percentage uncertified	3·4	2·6	1·5	1·0	0·7	0·7	0·9	1·0	0·7	0·8

From the above table it will be observed that the percentage of deaths certified by the Coroner has gradually increased, and that there has been a corresponding diminution in the percentage of the uncertified deaths.

Water Supply.

There was a greater rainfall during 1910, and rain fell on a larger number of days than in any year since 1903, consequently there was a plentiful supply of water of excellent quality.

The water supply of Halifax is derived from five separate valleys—the Hebble, the Luddenden, the Widdop, the Greave, and the Walshaw Dean.

The collecting ground or drainage area of the reservoirs comprises over 4,800 acres, and is chiefly moorland or high mountain pasture, and of the millstone-grit formation.

The water is collected at such level that it can be conveyed into the reservoirs for both storage and supply. It is delivered by gravitation, and is supplied to the main portion of the town at a high pressure, and with a constant supply.

The higher portion of the town however is supplied from a service reservoir at Roiles Head, to which water is pumped from Albert reservoir, the lift being 300'.

The new reservoirs at Walshaw Dean, although completed and opened in 1907, have not yet been utilised, as certain leakages were discovered with which the committee has had to deal. These defects have now been ascertained, and it is expected that in the near future the reservoirs will be made watertight.

The Waterworks Committee now owns 10 storage and 6 service reservoirs, having a total capacity of 1,955,222,000 gallons.

In the main, storage reservoirs are relied upon for the clarification of the water, but in connection with Ogden and Ogden Kirk high pressure filters have been instituted.

During the year under review the old filter at Ogden Kirk has been replaced by a new one of a larger capacity, and the results obtained therefrom have been much more satisfactory.

The water, coming as it does chiefly from high moorland, is very soft and liable to contain an excess of peaty acids, hence it is liable to exercise a solvent action upon lead. That being so, it is necessary to add lime in order to slightly harden the water and reduce its acid qualities.

All the water supplied by the Waterworks Committee is now treated in this way, one grain of slaked buxton lime being added to each gallon of water as milk of lime.

In the case of Ogden Kirk, where the water is excessively acid, eight grains per gallon are added ; also a quarter of a grain of allumina ferric per gallon, in order to assist in clarifying the water.

The following table, which is prepared from figures obtained from the analyses of Mr. Dewhirst, the Borough Analyst, gives the acidity of the water before and after treatment.

Month	Average Acidity of Sample of Water, in parts per 100,000.			
	Ogden Reservoir		Ramsden Wood Reservoir	
	Before Treatment	After Treatment	Before Treatment	After Treatment
January ...	No estimation	No estimation	No estimation	No estimation
February ...	1·4	·3	„	·08
March ...	No estimation	No estimation	„	·1
April ...	·85	·23	„	·11
May ...	·77	·2	„	No estimation
June ...	·72	·18	·35	·09
July ...	·80	·12	No estimation	No estimation
August ...	·70	·08	„	·06
September ...	·80	·10	„	·09
October ...	·5	·05	„	·15
November ...	No estimation	No estimation	„	·24
December ...	„	„	„	·13

With regard to the Ogden supply, which contains more than twice as much acid as Ramsden Wood

Reservoir, it will be observed on referring to the above table that the result of the treatment very materially reduced the acidity of the water as finally supplied to the inhabitants of the Borough. In fact, the above figures are averages of the amount of acidity contained in the samples analysed when found acid in re-action, but on eight occasions the water was found to be either neutral or alkaline, so that the water actually supplied to the consumer as regards this matter was even better than the above figures indicate.

With regard to Ramsden Wood only one estimate was made during the year before treatment. The water of this reservoir however does not appear to vary very much. It is found generally to contain about $\cdot 4$ parts per 100,000 of acid, and therefore contains less than half the amount of acid present in the Ogden supply.

I consider the effect of the treatment upon the water of Ramsden Wood Reservoir very satisfactory, except perhaps during the month of November, when the average acidity as shown by the above table was $\cdot 24$ parts per 100,000.

Upon 37 occasions Ramsden Wood water as finally supplied to the consumer was found to be neutral or alkaline after treatment.

I have been anxious that the treatment should be so applied as to bring the water somewhere near the neutral point, and have impressed it upon Mr. Hartley, the Waterworks Engineer, on several occasions. I am glad to find that during the past year he has more nearly reached that point in his treatment of the water than ever before

The Waterworks Committee are rendering a priceless service to the community from a public health standpoint in their treatment of the water supply. This is self-evident from the fact that no cases of lead poisoning now occur within the Borough, whereas ten years ago, before this treatment was resorted to, numbers of fresh cases annually occurred.

Sewerage and Drainage.

The following particulars have been supplied to me by Mr. Lord, the Borough Engineer.

As usual the sewers have been regularly flushed, and are generally in a satisfactory condition.

One length of 1,100 yards has been partially renewed and repaired during the year.

In the Copley district an extension of 342 yards of a 9in. pipe sewer has been laid for the purpose of intercepting the sewage of houses that formerly discharged upon land, causing a nuisance ; also a 12in. and 9in. sewer, 730 yards long.

In the Northowram district 2,060 yards of 15in., 12in. and 9in. pipe sewers have been laid, including the main outfall sewer from the Borough boundary near Mytholme to Stump Cross. Also 250 yards of 18in. cast-iron pipe sewer have been relaid in the Ovenden Brook, as well as short lengths of new sewer in various parts of the town where necessary.

Additional percolating filter beds have been constructed at the outfall works at Salterhebble during the year, and these filters are working satisfactorily.

Scavenging, Disposal of Night Soil and House Refuse.

The scavenging, cleansing, and watering the streets is carried out by the Health Committee, and this important work from a health standpoint, has been I believe satisfactorily carried out during the year.

In connection with the disposal of night soil, there are now 18,103 goux closets in the Borough, an increase of 65 during the year.

Efforts have been made during recent years to diminish this form of closet, and as a result they are increasing now at a much slower rate than was formerly the case.

There are 6,421 water closets, an increase of 324 during the year.

Water closets are now increasing at a much more rapid rate than used to be the case. From a sanitary standpoint it is highly desirable that they should be still further increased in the future, at the expense of the goux closets, which are objectionable in many ways.

The goux tubs are renewed at periods varying from 3 to 10 days according to circumstances, the tubs being washed upon each occasion on which they are emptied. There are 20 horses and vans and 30 men engaged on this work.

The following table gives the number of water closets in the Borough, and shows the increase which has taken place since the year 1893.

Year	Number of W.C.'s in the Borough
1893	3796
1894	3837
1895	3880
1896	3921
1897	3962
1898	4003
1899	4166
1900	4331
1901	4496
1902	4661
1903	4826
1904	4991
1905	5157
1906	5317
1907	5566
1908	5852
1909	6097
1910	6421

There are still 799 privy middens in the Borough, against 809 during the previous year, or a decrease of 10, and 431 dry ashpits, against 432 a year ago, or a decrease of 1 only during the year.

A large number of the above privy middens are situated in those portions of the Borough which have been more recently added thereto. They are being gradually converted where possible into water closets.

The Health Committee undertakes the removal of house refuse, tubs being supplied in most cases by the Corporation for its reception at the house.

The average number of horses and carts used for the removal of this refuse was 15, and the number of men engaged in the work during the past year was 30.

The house refuse is still disposed of by tipping, which is not the most sanitary way of dealing therewith.

During the year a machine called a "Dust Manipulator" has been installed. In this machine special hammers are arranged to revolve at a great speed, and any refuse or garbage placed therein is quickly reduced to a kind of mold.

To this machine the garbage from the slaughterhouse and market hall is carted, as well as fish refuse from certain shops in the town. This garbage, together with a certain proportion of house refuse, is put through the machine, and converted into a good manure, which at present is finding a fairly ready market, at the price of 1/- per ton.

The amount of garbage and house refuse dealt with by this machine varies from 55 to 60 tons per week.

The treatment of the garbage and fish refuse in this way has remedied the most serious nuisance that existed within the Borough. Before this method of treatment was adopted, this refuse was carted and buried in a field in the Southowram district. There were springs of water in this field, and any water percolating the soil washed out decomposing filth therefrom, which caused a serious nuisance, the offensiveness of which was perceptible at long distances.

Common Lodging Houses.

Under a local Act of Parliament, these houses are now required to be re-registered in May of each year. There are 16 of such houses situated within the Borough, and they are registered to accommodate 853 lodgers, against 699 for the previous year.

The police are responsible for the general conduct of the common lodging houses, and I am informed by the Chief Constable that there has been no cause for complaint during the year as to the breach of any of the regulations in force with reference thereto, and that they have been conducted in a fairly satisfactory manner.

Factories and Workshops.

The Factories and Workshops Act of 1901 has been well administered during the year. Many important improvements have been carried out, more especially in connection with the sanitary conveniences of factories.

More work has been done in this connection during the past year than usual. There are still however several factories and workshops in the Borough, the sanitary conveniences of which are not altogether satisfactory. These will however be gradually dealt with in due course.

In one instance the owner failed to carry out the notice given by the sanitary authority, to convert certain insanitary privies into water closets. Legal proceedings were taken in this case, with the result that a penalty of £2 with costs was imposed, and a daily penalty of £1 if the work was not carried out within one month. The necessary alterations were then carried out.

Limewashing was more promptly attended to during the year under review, but as regards the neglect of general cleanliness of workshops, rather more complaints were made.

The complaints regarding the limewashing of workshops were 29 against 45, while dirty closets, floors, &c., numbered 19 against 13 for the previous year respectively.

No cases of overcrowding were reported on during the year, but 7 complaints were made regarding defective ventilation. These were all remedied in due course.

The following table gives the number of visits that were made to factories and workshops, and to shops under the Shop Hours Act, by the district Sanitary Inspectors.

District	Number of Visits made to Factories	Number of Visits made to Workshops	Number of Visits made under Shop Hours Act
A	69	404	359
B	98	374	258
C	63	229	346
D	27	91	13
Total ...	257	1098	976

We have no special Inspector allocated to the inspection of workshops, each of our four Inspectors carry out this particular work within his own district. The work done in each district is set out in the tables which follow.

To factories and workshops the Sanitary Inspectors made a total of 1,355 visits, against 1,350 during the previous year, and during the year I paid 13 visits to various factories in order to inspect the same, and advise regarding alterations required to the sanitary conveniences.

The following tables indicate the nature, number of the various sanitary defects, and the amount of work done by the Sanitary Inspectors in their respective districts.

DISTRICT A.

INSPECTOR JOHN GEORGE WALSHAW.

Number of Workshops on the Register, 266.

Nature of Defects					Number Registered
IN FACTORIES.					
Offensive Smoke	...	...	...	...	4
Insufficient closet accommodation	...	...	...	...	3
Defective and made-up drain	...	...	...	...	1
Closets not marked for sexes	...	...	...	...	2
Insanitary Closets	...	...	...	...	33
Closets requiring ventilation, or intervening ventilated space	...	...	...	...	7
Offensive accumulation	...	...	...	...	1
IN WORKSHOPS.					
Rooms requiring limewashing	...	...	...	...	9
Dirty closets	...	...	...	...	7
Inadequate ventilation	..	...	...	...	1
Defective water closets	...	...	...	..	5
Defective drains	...	...	...	...	2
Defective troughing	...	...	...	...	2
Want of closet accommodation	...	...	...	...	2
Total					79

DISTRICT B.

INSPECTOR ROBERT PICKARD.

Number of Workshops on the Register, 276.

Nature of Defects					Number Registered
IN FACTORIES.					
Offensive smoke	...	...	...	...	3
Offensive goux closets	...	...	...	...	3
Insufficient light and ventilation to water closets	...			...	1
Insufficient closet accommodation	..	...	...	...	6
Defective, made-up, and untrapped drains	...		...	...	5
IN WORKSHOPS					
Rooms requiring limewashing	...	...	...	...	17
Insufficient ventilation	...	...	...	..	4
Insufficient closet accommodation	..	...	...	...	3
Defective drains and sink pipes	...	...	...	...	3
Want of separate water closets for sexes	...		...	...	2
Made-up water closets	...	...	...	...	1
Defective Water closets	..	...	...	...	3
Insufficient flush to water closets	...	...	...	...	1
Sink waste pipe connected to soil pipe	...		...	...	1
Dirty floors, staircases, and closets	..		..	..	10
Abstracts not provided	...	...	...	...	2
Defective eaves spout	...	..	...	...	1
Total					66

DISTRICT C.

INSPECTOR JAMES EDWARD FIRTH.

Number of Workshops on the Register, 174.

Nature of Defects					Number Registered
IN FACTORIES.					
Want of light to water closets	...	...	...	...	24
Want of intervening ventilated space	...	...	...	...	4
Made-up water closets	...	...	...	...	16
Dirty closets	...	...	...	...	2
Offensive goux closets	...	...	...	...	6
Offensive trough closet	...	...	...	...	1
Made-up urinal	...	...	...	...	1
Water in cellar...	...	...	...	...	1
Closets insufficiently ventilated	...	...	...	...	4
IN WORKSHOPS.					
Insufficient ventilation	...	...	...	...	2
Insufficient closet accommodation	...	...	...	...	2
Workrooms requiring limewashing	...	...	...	...	3
Defective lead trap to sink waste	...	...	...	...	1
Total					67

DISTRICT D.

INSPECTOR FRED TEAL.

Number of Workshops on the Register, 96.

Nature of Defects				Number Registered
IN FACTORIES.				
Offensive Urinal	...	...	...	1
Offensive Closets	...	...	...	10
IN WORKSHOPS				
Abstracts not provided	...	...	...	2
Total				13

On referring to the foregoing tables it will be seen that 225 nuisances and sanitary defects were dealt with, against 349 during the previous year.

There remained 137 defects unabated at the end of the previous year, which, together with the above 225, made a total of 362 ; of these 345 were remedied and 17 remained unabated at the end of the year.

Under section 5 of the Factories and Workshops' Act the Factory Inspector sent 21 notices regarding sanitary defects, of which 11 were in connection with factories, and 10 in connection with workshops.

Most of the above were attended to during the year, and in each case after completion of work a notice was sent to the Factory Inspector informing him of that fact.

The number of notices of abatement sent to the Factory Inspector were as follows :—

Factories ...	...	...	23
Workshops	...	...	7
Bakehouses	...	...	3

It will be observed that a much larger number of notices after completion of work were sent to the Factory Inspector than notices sent by the Factory Inspector to this department. This arose from the fact that a large number of defects were outstanding at the end of the previous year, which have been attended to and completed during the year under review.

Under section 107 of the Factories and Workshops' Act, which refers to the outworkers, there was a slight increase both in the number of lists sent in and in the number of outworkers.

The Sanitary Inspectors visited all the outworkers during the year, 70 visits having been paid for that special purpose.

There were 14 lists sent in, against 13 during the previous year, and the number of outworkers notified was as follows.

	Tailors	Shoe-makers	Seam-stresses	Total
No. of Outworkers ...	22	6	4	32

The premises of the outworkers who work in their own houses were all found to be in a satisfactory condition and free from infectious disease, and those of the outworkers who occupy workshops of their own were visited in that respect, and there was no cause for complaint.

One of the lists sent in contained the name and address of an outworker who resided outside the Borough, viz., at Hipperholme. A notice in accordance with the Act was therefore sent to the Medical Officer of Health for that district.

A firm in Bradford employ an outworker in Halifax, and we duly received notice of that fact from the sanitary authority at Bradford.

The following is a detailed list of all the workshops on the workshops register. This register has been kept up-to-date from lists received from the Factory Inspector, and there has been a decrease of two during the year.

Pattern Card Maker ...	1	Saddlers ...	9
Joiners & Cabinet Makers	65	Milliners ...	62
Brush Makers ...	11	Cotton Doubler ...	1
Provision Merchants ...	4	Coopers ...	3
Rag Sorters ...	4	Bakehouses ...	131
French Polishers ...	10	Wood Turner ...	1
Tailors ...	58	Drug Packing ...	1
Marine Store Dealers ...	3	Whitesmiths ...	2
Blacksmiths ...	19	Coach Builders ...	3
Upholsterers ...	13	Rope Makers ...	2
Umbrella Makers ...	2	Wood Carvers ...	3
Box Makers ...	4	Wool Sorters ...	6
Surgical Instrument Mak'r	1	Cork Cutter ...	1
Fruit Boilers ...	1	Gun Makers ..	2
Plasterers ...	2	Carpet Repairers ...	7
Hosiery and Knitters ...	15	Picture Frame Makers ...	5
Wheelwrights ...	11	Wire Worker ...	1
Painters ...	9	Basket Makers ...	3
Plumbers ...	24	Tinners ...	12
Printers ...	8	Locksmiths ...	5
Sweet Boilers ...	2	Cutler ...	1
Cistern Makers ...	2	Underclothing Makers ...	14
Clog Sole Makers ...	3	Blind Makers ...	2
Belt and Brace Makers ...	3	Electrical Engineers ...	4
Oil Merchants ...	2	Piano Makers ...	5
Rug Makers ...	2	Firelight Makers ...	3
Watch Makers & Jewellers	11	Drysalter ...	4
Motor Repairers...	1	Boot Upper Maker ...	1
Leather Cutters ...	4	Cycle Repairer ...	1
Sugar Packers ...	2	Sign Writer ...	1
Designers ...	3	Brass Works ...	3
Metal Engravers ...	3	Laundries ...	12
Hair Dressers ...	9	Hair Pad Makers ...	6
Metal Polish Makers ...	3	Machine Makers ...	6
Carpet Beater ...	1	Machine Brokers ...	3
Chair Maker ...	1	Marble Masons ...	4
Photographers ...	6	Shoeing Smiths ...	9
Billiard Table Maker ...	1	Firewood Cutters ...	2
Ventilating Engineers ..	2	Skep Makers ...	1
Trunk Maker ...	1	Dentists ...	4
Fireplace Maker ...	1	Steel Skewer Maker ...	1
Boot, Shoe, and Clog		Beer Bottler ...	1
Makers ...	148	Concreter ...	1
Weight and Scales Maker	1	Dry Cleaner ...	1
Dress and Mantle Makers	114	Bookbinders ...	2
Total number of Workshops, 943.			

Bakehouses.

The bakehouses were regularly visited and inspected during the year.

The bakehouse register has been revised and kept up-to-date. The number of bakehouses on the register was 131, against 100 during the previous year, being an increase of 31 for the year.

This increase has arisen through the opening of a number of small bakehouses, really of a domestic character. Four of these however were not of that class and the premises in each case were inspected by myself, and found to be fit for the purpose, before permission was granted for them to be occupied as such.

The number of underground bakehouses remained the same as before, viz., 26.

Each Sanitary Inspector is responsible for the supervision of those bakehouses situated within his own district, and the number of visits paid to bakehouses during the year was 418, as the following table will show.

Description of Premises	Number on Register	Number of Visits made
Wheat Bread and Muffin Bakers, including Confectioners	119	418
Oat Bread and Muffin Bakers	12	

It would appear that occupiers keep their bakehouses in a better condition generally than formerly was the case. The largest number of complaints, as

usual, had reference to the neglect of limewashing the bakehouse at the proper time. A larger number of complaints were necessary during the year under review under this heading than was the case during the previous year.

Limewashing is an important matter in connection with the cleanliness of a bakehouse, and ought to be more carefully attended to than is the case.

The number of defects, including limewashing, reported during the year was 49. There remained unabated at the end of the previous year three defects, making a total of 52 for the year, of which 49 were remedied, leaving three unabated at the end of the year.

The following table shows the number and character of the defects reported, and the number remedied.

Nature of Defects				Number Reported	Number Remedied
Brought forward from last year	...			3	...
Bakehouses requiring Limewashing	...			35	35
Sink Pipes to disconnect	..	...		3	3
Defective Sink Drain	...	...		1	1
Defective Yard Drain	...	...		1	1
Defective Basement Drain	...	...		1	1
Defective Box Traps	...	...		2	3
Defective Ceiling	...	...	...	1	...
Dirty Closets	...	...	...	1	1
Made-up Drain	...	...	...	1	1
Dirty Floors	...	...	...	2	2
Defective Soil Pipe	...	...	...	1	1
Total	...			49	49

Ice Cream Makers and Vendors.

The premises used by ice cream makers were visited during the year by myself as well as the Inspectors, but there was no serious cause for complaint.

Offensive Trades.

Under section 112 of the Public Health Act, 1875, the number of offensive trades carried on in the Borough during the year were as follows.

Bone Boilers	...	...	2
Blood Boiler	...	...	1
Soap Boilers	...	...	2
Tripe Boilers	...	...	9
			<hr/>
			14
			<hr/>

The above premises were regularly visited during the year, and in connection with two tripe boilers, complaints were necessary regarding defective floors, and in one case respecting the dirty condition of premises generally. These matters were being dealt with at the end of the year. As regards the remainder they appeared to be fairly well conducted.

Public Health Laboratory.

There were 71 specimens examined in the Public Health Laboratory, against 78 during the previous year.

The following table gives details regarding the specimens examined.

Disease	Number of Specimens	Results of examination	
		Positive	Negative
Anthrax (Blood)	4	2	2
„ (Kidney)	1	1	...
Diphtheria (Swabs)	36	12	24
Typhoid (Widal's)	4	...	4
Tuberculosis (Sputum)	19	...	19
„ (Milk)	2	...	2
„ (Pus)	3	...	3
„ (Intestine of Cow)	1	...	1
Blood	1	Pernicious Anæmia	
Total	71	15	55

The majority of the specimens examined for Anthrax were from the slaughterhouse, and most of the animals which gave positive results had been brought in from outside districts.

With regard to diphtheria three fewer swabs were examined than during the previous year, but one-third of them were found to give positive results, a larger proportion than has usually been the case. This may probably be accounted for by the fact that diphtheria was rather more prevalent in the Borough during the year.

Disinfection.

Owing to the fact that notifiable infectious disease was less prevalent in the Borough during the year, it was not necessary to carry out so much work in connection with disinfection as is sometimes the case.

In the disinfecting apparatus, which is situated at Stoney Royd Fever Hospital, there were 9,121 articles of bedding, clothing, &c., disinfected by steam, against 13,443 during the previous year.

Sulphur is now practically replaced by formaldehyde for fumigation purposes, and 686 rooms in private houses were so disinfected, against 1,141 during the previous year. The formalin spray was also used in those cases where it was found necessary.

Chiefly owing to the prevalence of diphtheria, more school rooms were fumigated than during the previous year, and 30 rooms in the infants' departments of two elementary day schools were so disinfected, as shown in the following table.

Date	Name of School	Number of Rooms Disinfected
March 26th ...	Lee Mount	27
November 5th ...	Warley Town School ...	3
	Total	30

All books belonging to the public libraries found in houses in which an outbreak of infectious disease occurs, are taken charge of by the Inspectors, and disinfected in a special apparatus provided for the purpose at the Hall Street Depot. There were 123 library and other books so dealt with during the year.

A large quantity of disinfecting fluid has been distributed free of charge, from the Health Office. The quantity so used is now greater than formerly, owing to the fact that it is now given out to cases of phthisis.

Disinfecting powder is also supplied free, on application at the Hall Street Depot.

Schools and Infectious Disease.

Although there was less notifiable infectious disease in the Borough during the year under review, there was a greater prevalence of non-notifiable diseases, so much so, that it was necessary to close five schools during the year.

The following table gives the schools dealt with, and the length of the period of closure.

Disease	NAME OF SCHOOL	Date of Closure	Period of Closure
Measles	Salterlee	March 11	2 weeks
„	Northowram “Infants”	April 6	3 weeks
„	Akroyd Place „	July 5	{ 3 weeks, 4 days
Measles and Whooping Cough }	Salterhebble	Nov. 14	3 weeks
Measles	Siddal	Dec. 5	3 weeks

The following table gives a list of the schools affected with Scarlet Fever and Diphtheria, and shows the number of cases reported in connection with each school.

Name of School				Scarlet Fever	Diphtheria	Total
St. Augustine's	...	...		10	1	11
Battinson Road	...	...		3	8	11
Parkinson Lane	...	...		11	4	15
Sunnyside	...	...		3	1	4
Christ Church, Pellon	...	...		1	2	3
Moorside	...	...		2	4	6
Queen's Road	...	...		2	2	4
Haugh Shaw	...	...		2	7	9
Siddal	...	...		6	2	8
Portland Road	...	...		10	4	14
Holy Trinity	...	...		10	3	13
Parish Church	...	...		1	1	2
Salterhebble	...	...		3	...	3
Southowram	...	...		1	1	2
Council Secondary	...	...		1	...	1
Boothtown	...	...		10	2	12
Mixenden	...	...		...	1	1
Akroyd Place	...	...		8	3	11
Warley Road	...	...		5	1	6
Salterlee	...	...		...	1	1
Lee Mount	...	...		5	22	27
Copley	...	...		...	2	2
Pellon Lane	...	...		7	3	10
Luddenden	...	...		5	...	5
St. Marie's	...	...		3	1	4
Caddy Field	...	...		2	...	2
Heath Grammar School	...	...		2	...	2
Withens Field...	...	...		4	...	4
Girls' High School	...	...		1	...	1
All Saints	...	...		...	1	1
Halifax New School	...	...		1	...	1
Warley St. John's	...	...		2	1	3
Total	...	...		121	78	199

On referring to the above table it will be observed that Lee Mount School was most affected by Diphtheria. The cases occurred chiefly in the infants' department, and partook of a rather more extensive outbreak than has been usual in this Borough.

Of the 137 cases of Diphtheria reported during the year, it will be seen that 78 of these were of school age. This is a larger percentage, being 56 per cent., against 47 per cent. during the previous year.

Scarlet Fever having been much less prevalent than during the previous year, the schools were less affected by this disease, and there was no extensive outbreak in connection with any school.

Out of the 237 cases reported, 121 were children of school age, which is a lower percentage, being 51 per cent., against 61 per cent. during the previous year.

A number of suspicious cases of fever were reported to us from the Education Department, all of which were visited as soon as possible. It was necessary to visit 12 of these cases myself, in various parts of the Borough, and in this way a few cases were discovered which otherwise might have escaped attention.

Furnished Rooms, Houses Let in Lodgings, House-to-House Inspection.

The number of furnished rooms in the Borough has increased, there being 190, against 156 during the previous year. These rooms are now included by virtue

of the Halifax Corporation Act, 1905, amongst houses let in lodgings, to which the byelaws with respect to houses let in lodgings apply.

These furnished rooms have been kept under supervision by the Sanitary Inspectors, 535 visits having been paid for that purpose. The byelaws also appear to have been fairly well carried out.

Rather more work was done during the year in connection with house-to-house inspection, when 2,450 were inspected, against 1,776 during the previous year.

The number of defects of various kinds found in connection therewith was 483, and the percentage of houses found to have defects of some kind or other was 19·7, against 16·7 during the previous year. These included 314 defects in connection with drainage, or a percentage of 12·8, against 7 during 1909.

In 7 cases overcrowded houses were found.

Meteorology.

Mr. Green, the Chief Librarian, has charge of the Borough Meteorological Station, which is situated at Belle Vue, at an altitude of 625ft. above sea level.

It is highly desirable that a Sunshine Recorder should be added to the instruments under the care of Mr. Green.

The general summary of his observations have been supplied to me, and are to be found on the next page.

Like 1909, the summer of last year was wet and cold, and rain fell on 213 days. There were thus a larger number of wet days than occurred during any year since 1903, the latter year having the largest number of wet days, and the largest rainfall of the past 17 years.

The amount of rain collected during 1910 was 36·62 inches, against 35·69 during the previous year.

General Summary of Meteorological Observations taken at the Public Library, Belle Vue, from January 1st, 1910, to December 31st, 1910.

By E. GREEN, LIBRARIAN.

LATITUDE OF STATION = 53° 43' N.

LONGITUDE = 1° 52' W.

HEIGHT ABOVE SEA LEVEL = 625 FEET.

1910.	Pressure of Atmosphere in Month.		Temperature of Air in Month.							Mean Temperature.		Vapour.			Mean degree of Humidity, Saturation=100.	Mean Weight of a cubic foot of Air.	Mean Reading of Thermometer.			Wind.										Mean amount of Cloud.	Rain.		REMARKS
Month.	Mean.	Range.	Highest.	Lowest.	Range.	Mean.			Air.	Dew Point.	Elastic Force.	In a cubic foot of Air.		Maximum Rays of Sun.			Minimum on Grass.	Estimated Strength.	Relative proportion of														
						Of all Highest.	Of all Lowest.	Daily Range.				Mean.	Short of Saturation.						N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calms.	No. of Days it fell.	Amount Collected.				
	in.	in.	°	°	°	°	°	°	°	°	in.	gr.	gr.		gr.	°	°													in.			
January	... 29.120	1.816	57.9	11.1	46.8	41.1	31.5	9.6	36.3	33.2	0.190	2.2	0.3	89	544	51.2	23.0	1.7	4	0	0	0	2	16	13	14	4	6.1	19	4.40	The observations have been reduced to mean values by Glaisher's Barometrical & Diurnal Range Tables, and the Hygrometrical results have been deduced from the seventh edition of Hygrometrical Tables, after corrections for Index errors of the Instruments employed.		
February	... 28.879	1.242	50.7	28.9	21.8	44.1	34.0	10.1	39.0	35.7	0.210	2.4	0.4	89	555	70.0	27.4	2.2	5	0	0	3	7	15	11	6	1	7.3	25	3.36			
March	... 29.502	0.998	56.1	28.1	28.0	47.3	35.0	12.3	41.2	36.4	0.215	2.5	0.5	84	546	80.6	31.1	1.7	10	7	4	2	5	8	5	10	1	5.2	12	0.67			
April	... 29.188	1.452	57.5	25.9	31.6	48.2	35.2	13.0	41.7	38.8	0.228	2.8	0.3	91	539	83.4	31.8	2.0	3	10	4	3	4	6	11	11	0	7.5	19	3.43			
May	... 29.264	1.080	70.9	32.9	38.0	56.5	41.1	15.4	48.6	43.7	0.285	3.2	0.6	84	533	95.9	37.9	1.7	3	13	3	3	0	6	3	14	7	6.8	20	2.26			
June	... 29.284	0.988	74.4	43.0	31.4	62.3	47.7	14.6	55.2	49.7	0.348	4.0	0.9	82	526	102.6	44.6	1.6	4	12	4	4	0	6	7	12	2	6.7	14	3.09			
July	... 29.267	0.854	74.4	42.7	31.7	61.3	47.9	13.4	55.0	50.7	0.370	4.2	0.8	85	525	102.8	44.4	1.8	5	14	1	1	4	7	7	10	3	6.4	13	3.04			
August	... 29.243	0.726	72.2	46.0	26.2	61.9	50.6	11.3	56.6	51.4	0.379	4.2	1.0	81	523	102.0	45.8	2.0	2	7	0	5	6	13	10	6	4	7.2	18	4.22			
September	... 29.580	1.934	71.7	38.9	32.8	57.7	46.1	11.6	52.4	47.1	0.323	3.7	0.8	81	534	92.1	38.0	1.3	11	10	1	1	0	3	1	16	7	5.2	7	0.19			
October	... 29.436	0.992	67.8	37.4	30.4	53.6	44.6	9.0	49.1	45.6	0.308	3.5	0.5	87	535	78.3	38.1	1.4	2	11	8	2	0	2	4	8	16	7.1	16	3.23			
November	... 29.010	1.588	51.9	24.9	27.0	41.3	31.9	9.4	35.9	32.6	0.185	2.1	0.5	85	541	57.8	25.1	1.2	7	0	0	4	1	6	3	21	8	5.6	21	4.43			
December	... 29.031	1.558	52.9	25.8	27.1	46.3	38.2	8.1	42.4	39.6	0.238	2.8	0.4	89	535	52.9	31.9	2.1	1	3	2	9	7	7	12	10	3	8.0	9	4.30			
Annual Means	29.234	1.271	63.2	32.1	31.1	51.8	40.3	11.5	46.1	42.0	0.273	3.1	0.6	85	536	80.8	34.9	1.7	5	7	2	3	3	8	7	11	5	6.6			

Mean Barometer at 32° and Sea Level=29.895 in.

Rain fell on 213 days, and the amount collected was 36.62 inches.

The Mean Monthly Readings of the Earth Thermometer, four feet below the surface, were as follows:—January, 42°; February, 40°; March, 41.5°; April, 43.7°; May, 45.9°; June, 51.1°; July, 53.4°; August, 54.5°; September, 53.4°; October, 52°; November, 46.3°; December, 43°.

Highest Readings of the Earth Thermometer (55°) were from August 15th to August 31st.

Lowest „ „ (39°) were February 1st, 2nd, and 7th.

The following table gives the rainfall for the past 17 years.

Year	No. of Days Rain Fell	Amount of Rainfall
		inches.
1894	158	30·31
1895	149	33·78
1896	172	32·02
1897	187	29·72
1898	182	29·49
1899	153	35·33
1900	205	39·68
1901	179	29·41
1902	191	28·03
1903	219	44·25
1904	191	29·32
1905	187	25·94
1906	207	33·84
1907	208	34·00
1908	184	30·65
1909	199	35·69
1910	213	36·62

Distributed over the gathering grounds of the Halifax Corporation Waterworks, there are 10 stations at which the rainfall is collected. The following table shows the amount collected in each case.

HEIGHTS ABOVE SEA LEVEL IN FEET.

1910	1380	1350	1325	1375	1040	1050	1060	990	815	795	568
	Walshaw Dean *	Midgley Moor *	Warley Moor *	Ovenden Moor *	Walshaw Dean Lodge	Widdop	Castle Carr Lodge	Ogden	Ramsden Wood	Albert	Gibbet
	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.
January ...	5·54	4·83	5·07	6·92	6·13	4·73	4·47	5·64	4·30	3·97	4·63
February ...	5·55	5·40	5·27	5·50	6·75	5·01	4·54	4·56	3·91	3·31	3·44
March ...	1·16	·97	·96	1·03	1·33	1·24	·97	·86	·79	·65	·64
April ...	4·61	5·00	4·57	4·12	5·59	4·89	4·81	3·66	3·29	3·48	3·72
May ...	3·09	2·91	2·66	2·87	3·20	3·05	2·84	2·67	2·19	2·19	2·17
June ...	3·57	3·36	3·54	2·80	3·93	3·29	3·55	3·06	3·20	3·15	3·00
July ...	3·98	4·57	4·17	4·91	4·24	4·09	4·26	3·84	3·50	3·01	3·12
August ...	5·96	5·58	5·53	5·61	6·57	5·50	5·24	5·31	4·53	4·37	4·30
September ...	·56	·33	·24	·46	·54	·45	·29	·31	·18	·15	·12
October ...	4·04	3·72	3·63	4·36	4·22	3·79	3·79	4·10	3·50	3·05	3·21
November ...	5·86	4·92	4·59	4·99	6·38	5·50	4·56	5·11	4·21	4·41	4·59
December ...	7·34	6·27	5·82	6·56	7·75	6·04	5·64	5·68	4·41	3·89	4·43
Totals ...	51·26	47·86	46·35	50·13	56·63	47·58	44·96	44·80	38·01	35·63	37·37

The average rainfall for the area of the Halifax Waterworks, like that in the Borough, was greater than the previous year, as the following will show.

Average Rainfall over all the Gauges, 1910				...	...	45·51
Do.	do.	do.	1909	...	...	42·74
				Difference	...	<u>2·77</u>

The average rainfall collected at the above stations is always greater than that of Halifax, and the difference for the year under review was 8·89 inches, which is rather a larger amount than usual.

Miscellaneous Matters.

I paid regular and daily visits during the year to the Borough Fever Hospital and the Goux Depot, and from time to time to the Smallpox Hospital, Warley Hospital, Hall Street Depot, Charlestown Depot, and Ovenden and Warley Stables.

The Slaughterhouse was visited by me on 17 occasions with the Veterinary Inspector, for the purpose of inspecting meat, and giving advice thereon as to seizure, &c.

Six visits were paid to the various tips in the Borough.

I paid 41 visits to various parts of the Borough for general inspection purposes, to inspect drains, and the sanitary condition of houses, &c.

One disused publichouse was converted into a common lodging house, which I inspected before a license was granted therefor. Several of the other common lodging houses I also inspected during the year.

I paid 13 visits of inspection to various schools in the Borough, and 12 to suspicious cases of infectious disease.

Various factories and workshops were visited by me upon 13 occasions, while 7 premises were inspected for the purpose of ascertaining their fitness or otherwise for bakehouses, and 4 of these were passed as suitable.

Some 58 visits were also paid by me for other purposes in the course of my duties during the year.

Borough Fever Hospital.

There were remaining in the Hospital on January 1st, 1910, 1 case of Diphtheria, 3 of Typhoid Fever, and 24 of Scarlet Fever, or a total of 28 patients, and there were admitted during the year 237 cases, including 32 from outside districts, against a total of 388, which included 25 non-residents during the previous year.

The following table shows the number that were admitted for each disease, and the mortality from the same.

Disease	Number Admitted	Deaths	Case Mortality per cent.
Diphtheria	53	10	18·8
Scarlet Fever	167	2	1·1
Enteric Fever	17	3	17·6
Total	237	15	...

On referring to the above table it will be observed that 15 deaths occurred, against 24 during the previous year.

The deathrate from each of the above diseases was considerably lower than during the previous year, when the mortality per cent. from diphtheria was 29·6, scarlet fever 2·9, and typhoid fever 28·5.

Scarlet Fever having been less prevalent in the Borough during the year, a smaller number of cases were admitted to the hospital.

Only one patient, who suffered from diphtheria, died within 24 hours after admission during the year, and one of the deaths which occurred from typhoid fever was a person not belonging to the Borough.

The following table shows the number of cases that have been admitted to the Fever Hospital since the year 1881.

Year	Small-pox	Cholera	Typhus Fever	Typhoid Fever	Scarlet Fever	Diphtheria	Others	Total
1881	16			17	34		2	69
1882	13		3	24	15		5	60
1883	2		2	26	8		5	43
1884	1			29	23		2	45
1885	15		1	16	23		4	59
1886	3			18	24		3	48
1887	3			18	54		1	76
1888	5		1	25	28		7	66
1889	4			54	33			91
1890				35	39		7	81
1891		1		47	47		6	101
1892	188		1	17	15		1	222
1893	340			4	1			345
1894	15			15	39		1	70
1895				39	25		7	71
1896				56	30		20	106
1897				32	237		3	272
1898				28	341			369
1899				38	515			553
1900	3			44	250		9	306
1901	3			18	597	12	43	633
1902	1			30	365	7		403
1903	140			24	219	17	4	404
1904	84			22	349	25	6	486
1905	57			29	246	22		354
1906				20	110	30		160
1907				43	42	45	1	131
1908				36	145	26	1	208
1909				21	340	27		388
1910				17	167	53		237

It will be observed that fewer cases were treated in the hospital than during the previous year, but still the number so treated during the year under review, with the exception of last year, was greater than in any year since 1905.

Mild and uncomplicated cases of Scarlet Fever are now detained in hospital for four weeks only. This enables a larger number of patients to pass through the hospital when necessary, and reduces the cost of maintaining the institution.

Patients are now given their final bath on the night previous to discharge, and are removed into a non-infective ward for the last night.

Since the shorter period of detention in hospital, and this method of discharging patients was adopted, we have had if anything, less return cases of this disease.

In conclusion I have to acknowledge the satisfactory manner in which the Institution has been managed by the Matron, Miss Robison, and the unremitting care and attention which the Charge Nurses have bestowed upon the patients, whilst the Probationers also have been faithful in the discharge of their duties.

Notification of Births' Act.

The above Act came into force in the Borough in March, 1908.

The number of births notified during the year under review was 1640, against 1700 during the previous year.

During the same period 1860 were registered, so that only 88 per cent were notified to the Medical

Officer of Health in accordance with the requirements of the above Act.

During the previous year 92 per cent. were so notified, so that a considerable number failed to carry out the Act. Unless an improvement takes place in this respect, it will be necessary for the matter to be taken up by your Committee, and no doubt a few prosecutions would be beneficial in the way of bringing home to parents, their responsibilities under this Act.

According to the figures supplied to me by the Registrars of the Cemeteries, there were buried 94 still-born children : there were however only 48 still-births reported, consequently it is evident that all the children that were still-born were not reported during the year.

Halifax Public Health Association.

The lady members of the above Association continue to render most valuable assistance to the official Lady Health Visitor.

The Committee of the Association is constituted as follows :

Alderman T. Hey, Chairman, Health Committee.

Dr. J. T. Neech, Medical Officer of Health.

Miss Alice M. Thompson, Lady Health Visitor.

Mrs. E. N. Whitley, Lady Superintendent.

Mrs. C. Smithson, ,, ,,

Mrs. J. Collinson, ,, ,,

Mrs. E. H. Hill, ,, ,,

Mrs. Crabtree, ,, ,,

Mrs. G. H. Smith. Mrs. Ward.

Mrs. Hack. * Mrs. A. Clay.

Mr. A. W. Whitley.

Miss Thompson, the Lady Health Visitor acts as Secretary, and the ladies of the Committee meet monthly to transact the business of the Association.

There are a number of voluntary assistant lady visitors, who follow up the visits of the official lady visitor, and thus keep in touch with mothers for a period of 12 months after the birth of the infant.

For the purpose of organisation, the Borough is divided into five districts. A certain number of voluntary visitors being assigned to each district, under the charge of a lady Superintendent.

The following table gives the names of the lady Superintendents and their respective districts.

District.	Lady Superintendent
Ovenden, Pellon and Kingston Wards	Mrs. E. N. Whitley
Akroydon and North Wards	Mrs. C. Smithson
Central and West Wards	Mrs. J. Collinson
South and East Wards ...	Mrs. E. H. Hill
Skircoat and Southowram Wards	Mrs. Crabtree

The following are the names of the voluntary assistant lady Visitors :

Mrs. Simpson	Mrs. Hepworth	Mrs. W. Clark
„ Seed	„ Taylor	„ Greenwood
„ Lumb	„ Hack	„ Mitchell
„ Bentley	„ Balme	„ Hogg
„ Wilson	„ Watkins	„ Parkinson
„ Smith	„ Sunderland	„ Wade
„ Meskimmon	„ Holroyd	„ Kidd
„ Ackroyd	„ Mitchell	„ Burnett

The number of visits paid by the voluntary Visitors in the various districts were as follows :

Ovenden, Pellon and Kingston Wards	111
Akroydon and North Wards	488
Central and West Wards	194
South and East Wards	256
Skircoat and Southowram Wards ...	231

These ladies paid a total of 1,280 visits during the year under review, against 1,233 during the previous year.

I am satisfied that the work being done by these ladies is of great value, and has played an important part in helping to reduce the infant mortality of the Borough.

Lady Health Visitor's Report.

Miss A. M. Thompson, the Lady Health Visitor, has submitted to me the following report.

I paid during the year 1037 visits to notified births, and 403 to guild cases and others.

I have found 136 houses fairly clean, 62 dirty, and the remainder clean. Two very dirty houses I reported to the Health Office to be dealt with by them.

The number of subsequent visits paid by the assistant visitors were as follows.

Ovenden, Pellon, and Kingston Wards	111
Akroydon and North Wards	488
Central and West Wards	194
South and East Wards	256
Skircoat and Southowram Wards ...	231

Of the 1,640 births notified, 923 were attended by medical men, the rest by midwives.

Out of 717 of the notified births, 680 were breast-fed, 37 only being bottle fed.

A very large proportion of the infants are breast-fed for 12 months.

It is gratifying to report that regular feeding is becoming more universal, many mother testifying to the benefit thereof both to the infant and themselves.

This is one of the advantages of the official visitor visiting during the lying-in period, as the mother can then be induced to put the infant to the breast every two hours, and thus by the time she gets up, the habit is formed.

In the later visits the mother has resumed her household duties, and it is more difficult to instil into her mind new ideas than in the earlier period.

In many towns the duties of the official visitor begins when the midwives visits cease, thus valuable time is lost.

For several years past the Association has arranged for an annual gathering of Midwives practising within the Borough for social and instructive purposes.

This meeting was held in November last, in the Girls' Guild Room, and was attended by about 20 of the Midwives. Tea was kindly provided by Mrs. Edward Whiteley. All the Lady Superintendents attended and assisted in the proceedings. Some practical demonstrations in connection with their work were given, and a short lantern lecture was delivered by the Medical Officer. These meetings are highly appreciated by the Midwives.

I weighed 175 infants under one week old, with the following results :—

3 weighed 11 lbs. each.			
15	„	10	„
43	„	9	„
69	„	8	„
34	„	7	„
4	„	6	„
7	„	5	„

More would have been weighed did mothers not object to it.

Mothers are finding out that Cocoa as a beverage is more nourishing than tea, and makes a better supply of milk, many who have been supplied with it, have been persuaded to continue the use of it.

A great need for nourishment in some form, for expectant mothers, also after confinement, has been felt. To meet this necessity a nourishment scheme was started in November.

Any mother in need can have a meal ticket which provides her with a dinner for 12 days, to be renewed if necessary at the expiration of that time. The rule being that she must consume the meal at the dining room arranged for, which is always the nearest at hand, otherwise the object we have in view, viz. :—that of nourishing the infant, through the mothers, would be defeated, as the meat would be divided amongst the family, the mother probably getting none. There were 28 who availed themselves of these tickets.

The Babies' Welcome Club is making steady progress, 37 members joined last year, against 28 during the previous year. This is encouraging, the more so in that the very poor are joining.

The Committee of the Public Health Association have lately appointed a Matron who is visiting five days a week in the various districts, so that she will be able regularly to collect these small sums. We are hoping for an increasing membership.

In connection herewith we have started a sewing meeting, and as soon as a mother joins the club, we persuade her to at once join it.

These meetings have been held weekly, 19 mothers having attended and paid a halfpenny each time, each garment made becoming the property of the maker.

We think that in this way we are helping these mothers to help themselves. They are encouraged to make 3 shirts, 3 petticoats, and 2 little dresses, a complete set of shortening clothes for the expected infant.

Many of the voluntary health visitors attend these meetings, and pay one penny each time. They take care of the babies while the mothers are sewing, or are making little garments, which are sold at a nominal price, small weekly payments being taken till paid for.

The mothers are to be encouraged to use "Non-flam" for under-garments in the future, because as a Health Association they consider they should discourage the use of flannelette.

The Lady Superintendents have provided a cup of tea and a bun each week, and have helped in cutting out. Mrs. Joseph Collinson especially, by her presence and interest, has done much to secure the success of these meetings.

The midwives I consider are doing good work, as a rule visiting every day for 10 days.

This regular attendance during the lying-in period is bound to have an influence for good upon the health of the mother, as up to quite recently the midwives only visited until the navel cord had dropped off, then leaving her to the mercy of a neighbour, but in most cases she had to look after herself and infant.

I cannot report that all are using the clinical thermometer, but many of them are doing so, and seem wishful to do what is required of them.

I have paid 91 visits on this work, and as a result have obtained the following particulars relative to the midwives' case books, of which, some are beautifully kept.

Number on Register	Case Books			
	Well kept	Fairly well kept	Not Up-to-date	No case book
25	17	4	2	2

With reference to the two not up-to-date, they cannot write or read themselves, and therefore do not understand how these registers should be kept, and have to depend upon relatives or others.

Of the two who did not possess a case book, one is employed as a monthly nurse, the other attending relatives only, having really ceased to practise, and as a matter of fact only attended one case during the year.

The midwives receive my visits to their patients quite cordially, and support my efforts in advising the mother in the care of herself and infant.

There were 25 midwives who notified their intention of practising within the Borough during the year, only one of this number is qualified by examination, the rest through long practise.

Six notices of sending for medical aid, and 48 of still-born infants were received during the year.

The following is a list of the midwives registered at the Health Office during 1910.

Name	Address
Jowett Sarah Alice ...	10, Beacon Hill Road
Crowther Hannah Elizabeth	39, Hammond Street
Marsland Emma ...	16, Cherry Street
Ogden Emma ...	42, Burnley Road
Shelley Emelina ...	6, Ellen Royd
Robinson Mary Ann ...	14, Ashbourne Grove
Smith Clara ...	40, Winding Road
Blakey Louisa ...	33, Commercial Road
Wade Hannah ...	Smith's Arms, Corporation St.
Crossley Hannah Holroyde...	25, Fairview terrace
Wilson Elizabeth Ann ...	1, Shoesmith's Buildings
Crabtree Isabella ...	31, Bright Street
Connew Sarah ...	23, Clay Street
Wood Mary Elizabeth ...	9, Fern Street, Boothtown
Sutcliffe Ellen ...	6, Spindle Street
Aaron Hannah ...	7, Lane Ends, Wheatley
Smith Emma ...	21, Causeway Foot
Halstead Frances Ellen ...	3, Aspinall Street East
Lake Lucy ...	14, Kell Lane
Milner Mary Hannah ...	8, Chestnut Street
Hitchen Phœbe Alice ...	66, St. Peter Street
Arnold Mary Ann..	13, Exchange Street
Woodhead Lucy ...	38, Chestnut Street
Edwards Sarah ...	47, St. Stephen Street
Warren Harriet ...	17, Spring Grove, Newstead

VETERINARY INSPECTOR'S REPORT.

Dairies, Cowsheds, and Milkshops.

Mr. J. POLLARD, M.R.C.V.S., D.V.S.M., has submitted the following Report :—

The number of Cowsheds and Milkshops on the register are as follows :—

Cowsheds	...	...	513
Milkshops	...	...	66
		Total	<u>579</u>

The total during the previous year was 562, being an increase of 17.

There were 360 Dairy Farmers and Purveyors of Milk on the register, against 392 for the previous year, a decrease of 32.

In accordance with the usual practice, a further number of cowsheds which did not conform to the Regulations were selected for alteration or reconstruction, and during the year under review five cowsheds were so dealt with. This number, together with 100 previously reported on, make a total of 105 cowsheds which now comply with the requirements of the Regulations—

The past year has been a very adverse one with cowkeepers, on account of the high price of newly-calven cows and the comparatively low price for fat ones, consequently we cannot expect farmers to show any great improvement on previous years. The chief cause for comment is with reference to cleanliness :— This does not entail a great amount of expense but of

personal labour, such as the grooming of cows, the thorough washing of hands prior to milking, and the wearing of suitable overalls during that process. I have noticed that cows frequently become plastered up with dung on the hind quarters and udders due to neglect in keeping the floor and stands clean. I have even been told by some that it was not considered advisable to remove the dung that adhered to the hind quarters, with the result extraneous matter in the form of dung, hair, etc., gain access to the milk.

It is no use quoting experiments carried out on behalf of several local authorities to prove that the bacterial condition of the milk is the most critical test of cleanliness—in other words a mirror reflecting the conditions under which the same is collected—as these are considered by the farmers to be more fads than of utility or importance. I am pleased to be able to report there is an increase in the number of purveyors supplying milk in glass bottles. This is an improvement over the ordinary milk kit, but I should like to see the more general practice of cooling the milk with a proper cooling plant. Milk drawn from healthy cows with normal udders should be practically sterile, but as milk is a good food for a large number of bacteria as well as human beings, it is necessary to cool the same so as to lower the temperature, and thus retard the growth and multiplication of other organisms which may gain access to the milk after being drawn from the cow, and thus prolong the time it would remain sweet.

If cowkeepers take these precautions in collecting and delivering milk from apparently healthy cows, I consider they should be recompensed accordingly, par-

ticularly so if the milk is from cows which have passed the tuberculin test, and applied every six months.

Most of the cities and large towns are endeavouring to obtain a supply of milk not only free from the tubercle bacillus, but from herds assured to be free from tuberculosis by means of the tuberculin test.

Birmingham has taken the lead in this respect, and provides the tuberculin and veterinary assistance free under certain conditions to farmers who send milk into that city.

In the course of my examination of cows during the past year I have not seen a typical case of tubercular udder. I have seen three cases of tubercular udders at the abattoirs from farms situated within the Borough, but outside the area I have been able to visit. It is the experience of most Veterinary Inspectors where cows are regularly examined that typical cases become rarer, consequently this emphasises the need of the application of the biological test of milk from doubtful cases.

During the year under review I paid 385 visits, and the Inspector for Illingworth district 531 visits, a total of 916, to the various cowsheds within the borough, and the District Inspectors paid 219 visits to the registered milkshops.

In consequence of these visits a total of 95 defects were discovered and reported, and 82 remedied, as the following table will show.

Nature of Defects	Number Reported	Number Remedied
Not Registered	3	3
Want of Light	1	...
„ Airspace	1	1
„ Ventilation	1	1
„ Middenstead	3	...
Defective Floors	3	4
Dirty Stands and Floors ... ..	...	1
Cowsheds to Limewash	64	63
Overflowing Liquid Manure Tank ...	3	4
Defective Middensteads	3	...
Cowsheds Overcrowded	8	5
Defective Made-up & Untrapped Drains	5	...
Totals for 1910...	95	82
No. of Defects on Books Jan. 1st, 1910	205	...
Total	300	...
No. of Defects on Books Dec. 31st, 1910	218	...

During the year 1,639 cows were individually examined, against 1,561 during the previous year.

In 17 cases were cows found to be affected with some abnormality of the udder.

Two cows were considered to be clinically tuberculous and were destroyed.

Details of the above inspections are set out in the following table.

INSPECTION OF CATTLE.

Date of Inspection	No. of Folio	Cattle and Condition		Condition of Shed	Remarks
		Number Examined	Udders Diseased		
1910.					
Jan. 5	146	26	Good except 1	2 Moderate, 3 poor	
" 5	146	6	Good, but dirty	Poor	
" 14	153	9	Fair	Good	
" 14	153	5	Fair, 2 dirty	Moderate	
" 19	153	13	Good, but dirty	1 Good, 2 poor	
" 21	157	7	Fair	Moderate	
" 21	157	13	Fair, several dirty	1 Moderate, 1 poor and dirty	Accumulation of manure
" 21	157	9	Good	Moderate	
" 21	157	12	Fair	Good	
" 27	160	3	"	"	
" 27	160	8	"	Moderate, but dirty	Not selling milk
Feb. 1	163	8	Fair, 2 dirty	Moderate	Floor defective
" 4	165	3	Good	Poor, very clean	
" 4	165	5	"	Good	
" 4	165	8	Fair	"	
" 4	165	12	Good	"	
" 4	165	13	"	1 Moderate, 2 poor	
" 4	165	4	"	Moderate	
" 4	165	15	Fair	Good	
" 4	165	6	Good	"	Overcrowded
" 4	165	17	"	1 Moderate, 2 good	
" 11	170	14	Fair, few dirty	1 Moderate, 1 poor	Floor defective
" 11	170	2	Fair	Poor	
" 11	170	5	Good	Good	
" 11	170	9	"	2 Poor	

Feb.	14	17230	Fair, few dirty		Moderate		
"	14	17212	"	1	Good	1 Cow with Mammitis affecting one quarter	
"	14	17212	Fair and very clean		"		
"	16	1736	Good and clean	1	Moderate	1 Cow with mammitis	
"	16	17312	Very good and clean		Good		
"	16	1737	Fair		Poor		
"	16	1739	"		"		
"	17	1745	Good and clean		"		
"	17	17422	Fair, but very dirty		1 Moderate, 1 poor		
"	17	17423	Good and clean	1	1 Good, 2 poor	1 Cow with mammitis affecting one quarter	
"	17	1745	Fair		Moderate		
"	17	1749	"		"		
"	22	17712	Fair, but few dirty		Poor	1 Overcrowded	
"	22	1775	Fair		"		
"	22	1777	"		Moderate		
"	24	1788	"		"		
"	24	17816	"		"		
"	24	17812	Good	1	"		
"	24	17933	Good, except 2	1	1 Moderate, 4 poor	1 Cow with suppurative mammitis	
Mar.	4	1838	Fair		2 Bad	1 Cow with injured quarter	
"	4	18310	Fair, few thin		1 Moderate, 1 poor		
"	4	18312	Good and very clean		"		
"	4	18315	Good		2 Moderate		
"	7	1866	3 Fair, 3 thin		Moderate		
"	7	1867	Fair, but dirty		"		
"	7	18611	Fair		"		

Inspection of Cattle—Continued.

Date of Inspection	No. of Folio	Cattle and Condition			Condition of Shed	Remarks
		Number Examined	Udders Diseased	General Condition		
1910.						
Mar. 7	186	10		Fair and clean	1 Moderate, 1 poor	
" 7	186	18		"	3 Bad	
" 14	190	7		Fair	Poor	
" 14	190	14		"	1 Moderate, 1 poor	
" 16	192	9		"	2 Poor	
" 16	192	17	2	"	3 Poor	
" 16	192	14		"	2 Moderate, 1 poor	
" 17	193	13		"	Poor	
" 17	193	19		Very good and clean	1 Moderate, 1 good	
" 17	193	11		Fair, but dirty	2 Poor	
" 17	193	7		Fair	Poor	
" 23	197	9		"	"	
" 23	197	12		Good	"	
" 23	197	14	1	Fair	1 Good, 1 poor	
" 23	197	12		Good	2 Poor	
" 23	197	24		Fair, few thin	3 Poor	
" 23	197	24		8 good, 1 thin	Bad	
April 7	206	9		Fair, 1 dirty	Good	
" 7	206	14		Fair	Moderate	
" 7	206	9		Fair	Poor	
" 7	206	7		Good	Moderate	
" 7	206	9		Fair	Poor	
" 8	207	2		"	1 Moderate, 1 poor	
" 8	207	4		3 Fair, 1 dirty	Bad	
" 8	207	1		Fair	1 Moderate, 1 poor	
" 8	207	9		Fair, 1 dirty		

April	8	207	19	1	16 Fair, 3 thin	1 Moderate, 1 poor	1 Overcrowded, 1 Cow with atrophied quarter
"	8	207	23	2	Good	2 Poor	
"	11	209	21		Good, 1 with dirty udder	1 Good, 1 mod., 1 poor	
"	11	209	8		Fair	Poor	
"	11	209	4		"	Moderate	Tank defective
"	14	212	9		Fair, few dirty	"	
"	14	212	10		Good	Good	
"	14	212	4		"	Moderate	
"	14	212	3		"	Poor	
"	14	212	13		Fair, 1 thin	1 Moderate, 1 poor	Consider the thin Cow to be tuberculous
"	15	213	8		Fair	"	
"	15	213	2		"	Bad	
"	15	213	9		"	Moderate	
"	15	213	18		"	1 Moderate, 2 poor	
"	15	213	4		3 Fair, 1 thin	Poor	
"	21	219	10		8 Fair, 2 thin	Good	
"	21	219	7		Good	Moderate	
"	21	219	10		Fair, few dirty	1 Moderate, 1 poor	Middenstead required
"	21	219	3		Fair	2 Poor	
"	21	219	8		"	Good	
"	29	224	12		Fair, few dirty	1 Good, 2 poor	
May	3	227	8		6 Good, 2 thin	Good	
"	4	228	13		Good, few dirty	1 Good, 2 poor	
"	4	228	11	2	Fair	Good	
Sep.	12	316	9		"	Poor	

Inspection of Cattle—Continued.

Date of Inspection	No. of Folio	Cattle and Condition			Condition of Shed	Remarks
		Number Examined	Udders Diseased	General Condition		
Oct.	3	413		Fair	Good	
"	3	45		"	Poor	
"	6	610		"	Moderate	
"	6	68		7 Fair, 1 thin and dirty	"	
"	6	66		Fair	"	
"	11	10		Good	Good	Mastitis affecting one quarter
"	13	126	1	Fair	Moderate	Atrophied quarter
"	13	125	1	Good	Good	"
"	13	125		3 Good, 2 fair	"	"
"	14	1318		Fair, 1 dirty	1 Moderate, 1 poor	Overcrowded
"	14	138		Fair	Moderate	
"	14	1325		Good	Poor	
"	17	1610		Fair and clean, regularly groomed	1 Moderate, 1 poor	
"	20	198		Fair, 1 dirty	Moderate	
"	20	1923		Good, few dirty	2 Moderate, 1 poor	
"	20	199		Fair	Poor	Requires new middenstead
"	21	209		Fair and clean	1 Moderate, 1 poor	
"	21	208		Good	1 Good, 1 Moderate	
"	24	224		Fair	Moderate	
"	24	224		"	Poor	
"	26	249		"	Moderate	
"	27	253		"	Poor	
"	27	2513		Good	3 Poor	
"	27	2518	1	Fair, several dirty	3 Good	

Oct.	28	26	5	Good	Poor
"	28	26	23	"	2 Moderate, 3 poor
"	31	28	4	Fair	Moderate
"	31	28	5	Good	2 Poor
"	31	28	10	"	2 Good
Nov.	1	30	12	"	1 Moderate, 2 poor
"	3	32	8	8 Fair, 1 dirty	1 Moderate, 1 poor
"	3	32	10	Fair, 1 dirty	2 Moderate
"	3	32	1	Good	Poor
"	3	32	9	"	"
"	4	33	10	"	Good
"	4	33	16	"	2 Good, 1 moderate
"	9	37	7	Fair	2 Moderate
"	9	37	10	Very good	1 Moderate, 1 poor
"	9	37	5	Good	Moderate
"	9	37	2	Fair	Poor
"	11	38	7	Good	"
"	14	40	20	"	2 Moderate
"	14	40	5	"	"
"	14	40	4	"	"
"	18	44	10	Fair	1 Moderate, 1 poor
"	18	44	15	"	2 Moderate
"	18	44	4	"	Moderate
"	18	44	12	"	1 Moderate, 1 poor
"	29	53	8	7 Fair, 1 lame and thin	2 Moderate
"	30	54	18	Good	2 Moderate, 1 poor

Inspection of Cattle—Continued.

Date of Inspection	No. of Folio	Cattle and Condition			Condition of Shed	Remarks
		Number Examined	Udders Diseased	General Condition		
Dec.	9	60	15	Good, few dirty	1 Good, 2 poor	
"	9	60	12	Fair	2 Good	
"	14	62	2	Good, 1 dirty	Good	
"	14	63	10	Fair	"	
"	14	63	4	"	"	
"	14	63	6	Good	2 Poor	
"	14	63	6	Fair	Good	
"	15	64	9	Fair, 1 dirty	"	
"	15	64	6	" 2 "	Moderate	
"	15	64	14	Fair	1 Moderate, 1 poor	
"	30	74	6	"	Poor	
"	30	74	13	Fair, few dirty	"	Overcrowded

Slaughterhouses.

There are eight private slaughterhouses in the Borough, being the same number as the previous year.

Of the eight only six have been regularly used throughout the year for the purpose of slaughtering.

All have been kept in a fairly satisfactory condition. Improvements have been made to the floors and walls of one of the private slaughterhouses.

During the year I have paid 1,113 visits to the abattoirs and the number of animals slaughtered during that period ended December 31st was as follows.

Cattle	Calves	Sheep and Lambs	Pigs	Total
6,883	3,237	20,687	4,848	35,655

There were 595 separate seizures of meat and offal during the year, and the following table shows the number of carcasses condemned and the total weight of the same.

	Cattle	Calves	Sheep	Pigs	Total
Number of Animals killed	6,883	3,237	20,687	4,848	35,655
Do. condemned	14	13	10	45	82
Weight of those condemned in lbs. ...	6,280	686	555	3,629	11,150

In the following table the diseases and other conditions which lead to the condemnation of the meat during the year are shown.

	Anthrax	Tuberculosis	Inflammatory Diseases	Jaundice	Septicaemia	Dropsical	Immature	Extensively bruised	Swine Erysipelas	Asphyxiated	Cadavers	Otherwise unsound	Decomposition
Cattle	3	7	2					1		1			
Calves			7		1	1	3	1					
Sheep			1			5					3	1	
Pigs		30	7	4					1	1		4	
Rabbits... ..													59
Turkeys													171
Geese													5

In addition to the above there were 17 seizures of fish, fruit, etc., and the following table shows the weight of the various kinds of food destroyed.

Kinds of Food Destroyed	Quantity in lbs.
14 Carcases of Beef	6850
Beef not in Carcase	192
13 Carcases of Veal	686
Veal not in Carcase	24
45 Carcases of Pork	3629
Pork not in Carcase	1061
10 Carcases of Mutton	555
Mutton not in Carcase	70
59 Rabbits	158
171 Turkeys	2052
5 Geese	45
Fish	2195
Fruit	140
Offal	6008
Other Foods	66
Total	24631

It will be noticed there were three cases of anthrax, against one for the previous year. I do think the persons responsible for the dressing of carcasses affected with anthrax should be made responsible for their actions, as the risk of infection to the person or persons dressing the carcasses is exceedingly great, apart from the question of danger in consumption of the flesh. They also create a source of infection which might cause serious loss at a later period, then wonder how the disease has originated.

The total amount of meat destroyed on account of tuberculosis was greater than the previous year, and as in previous years was the chief cause for the seizure and condemnation of meat, as the following table will show.

	lbs.
Total amount of meat destroyed	21,660
Total amount of meat destroyed on account of tuberculosis ...	6,025
Total amount of offal destroyed on account of tuberculosis ...	5,859
Total amount destroyed on account of tuberculosis... ..	11,884
Total amount destroyed from other causes	<u>9,776</u>

The greater part of the meat, fish, etc., destroyed during the year was voluntarily surrendered by the owner for destruction, and in only seven cases was it necessary to get a Justices' order.

There was one prosecution during the past year for exposing diseased meat for sale. Two other seizures were made but not proceeded with, one on account of being unable to get a Justice of the Peace at the time.

Number of visits made during the year.

Description of Premises	Number of Visits
Public Slaughterhouses	1113
Private Slaughterhouses	128
Borough Market	364
Wholesale Market	337
Fasting Sheds... ..	286
Potted Meat Houses	271
Tripe Boiling Houses	87
Butchers' Shops	3020
Fried Fish Shops	60
Cowsheds	385
Other Visits	140
Total	6191

In addition to the above I have paid frequent visits of attendance on the horses of the Health Committee at the Hall Street and Goux Depots, examined new purchases, also examined horses for other Committees.

Sale of Food and Drugs' Acts.

Considerable attention was paid to the administration of the above Acts during the year, 36 more samples having been taken than during the previous year, and a larger number of samples were submitted for analysis than during any recent year.

There were 12 unofficial samples taken during the year, all of which were found to be genuine.

The largest percentage of adulteration in the various articles taken, occurred in the case of Sweet Nitre. Grocers and small dealers have now ceased to stock this drug, and the samples taken were all from fully qualified chemists and druggists, and it would appear that even they have a difficulty in keeping this substance up to standard.

I am informed that one of the chief causes why this drug is so difficult to keep, is the presence of water therein, and that it would be much more stable, were it directed by the Pharmacopœia, that absolute alcohol should be used in its manufacture, instead of alcohol containing 10 per cent. of water.

Next to Sweet Nitre, the largest percentage of adulteration occurred in the case of Milk.

In 10 cases however the analysis showed the Milk to be only slightly below the government standard, and it was considered that a letter of caution would be sufficient in those cases. I accordingly wrote letters, which appeared to have the desired effect. Also a letter was written in reference to one sample of Butter which was found to be adulterated.

The Borough Analyst, Mr. J. A. Dewhirst, F.I.C., F.C.S., has presented the following Report on the result of his analyses.

There were 251 samples of Food and Drugs analysed during the year 1910. The following table gives the number analysed per 1,000 of the population in some recent years, and the percentage of adulteration.

YEAR	Number of Samples Analysed	Percentage Adulterated	Estimated Population of the Borough	Number of Samples Analysed per 1,000 of the Population
1896	218	3·2	94,764	2·30
1898	211	3·3	96,729	2·18
1900	210	4·7	101,187	2·07
1902	217	8·7	105,978	2·04
1904	209	9·1	107,000	1·95
1906	230	10·4	108,000	2·13
1908	213	7·5	109,000	1·95
1910	251	6·0	109,000	2·30

The proportion throughout the country has again risen from 2·88 per 1,000 in 1907 to 2·92 in 1908, and now to 3·03 in 1909. At this rate the samples taken in Halifax should number 330 per annum. As a result of my representation of the state of things in Halifax, a rather larger number of samples was taken during the year, but the proportion is still no higher than in 1896, whilst without doubt the necessity for more active sampling has increased since that year owing to the more prevalent sophistication in these days. Halifax is still behindhand to the extent of 80 samples per annum.

The following table shews the kind of samples dealt with, and the number of each, together with results of the analyses :

Article	Total	Genuine	Adulterated	Doubtful	Percentage adulterated
Milk	161	145	11	5	6·9
Butter	8	7	1	0	1·2
Lard	12	12	0	0	0
Cheshire Cheese ...	8	8	0	0	0
Malt Vinegar	8	8	0	0	0
Jam, Raspberry	8	2	0	6	0
Jam, Strawberry...	8	4	0	4	0
Ground Rice	8	4	0	4	0
White Pepper	8	8	0	0	0
Beer	6	6	0	0	0
Sweet Nitre	8	5	3	0	37·5
Camphorated Oil ...	8	8	0	0	0
Totals ...	251	217	15	19	6·0

The percentage of adulteration is less than last year, but there were more of the doubtful kind than last year.

Only 12 classes of Food and Drugs were examined, out of the 200 odd which are generally dealt with by Health Authorities. The administration of the Act in Halifax shews great lenience with regard to the great majority of Foods and Beverages, and to almost all Drugs, for which latter, standards have been so carefully fixed by the British Pharmacopœia.

No informal samples by various agents were taken to my knowledge, though the Local Government Board strongly recommend the method, and three times as many cases of adulteration are discovered in that way, as shewn in the small table given last year.

To mention our samples in detail, Milk still keeps up its percentage of adulteration, being in fact a little worse than the previous year. As to Butter, only 1 was deficient in Fat, and none exceeded the $\frac{1}{2}$ per cent. of Boric Acid allowed. Sweet Nitre remains a difficult subject to keep apparently. All the deficient samples being obtained from fully qualified chemists. I cannot understand this in view of my own experience in the manufacture and storage of the article, and also of my experiments in keeping it in small bottles exposed even to strong light. The Ground Rice contained steatite or talc in some instances and more attention might be paid to this article and to ordinary Rice. A case was described the other day in the "Lancet" where an intestinal calculus was found to consist entirely of this steatite, the person involved having been in the habit of eating a good deal of rice pudding. Of the Jams, some were found impure but all were labelled in accordance with their character. There are however ample grounds for prosecuting when the label states that the Jam is "improved" by the addition of other fruit juices or jellies. The better class firm now are careful to say that there is merely an "addition." Some Jams also contained preservatives, which are very prone to exceed limits.

There was no prosecution during the year.

The Local Government Board continue to send out, at intervals, their most valuable reports on various comestibles. These reports and the recommendations therein take rank practically as official standards, and any case for prosecution can be taken with confidence 'if' it transgresses the limits suggested. The latest are:—

“On the bleaching of flour and the addition of so-called ‘improvers’ to flour.”

“On the chemical changes produced in flour by bleaching.”

“On the presence of calcium sulphate in baking powder and self-raising flour.”

These and the others recently issued indicate the greatly increased activity and interest of the central authority in the administration of the Food and Drugs Acts.

Anyone entrusted with the direction of public sampling is necessarily obliged to keep himself “au courant” with the latest information and developments, and even with current prices of lard, olive oil, etc., etc.

Several instances of adulteration have presented themselves in my private practice during the year, and others of interest have been taken up in the Halifax district by the West Riding authorities.

The following extracts from the Local Government Board Report may perhaps be appended.

“In reviewing the results of the inquiries made during the year in regard to local administration under the Sale of Food and Drugs Acts, Dr. Buchanan lays stress upon the importance of frequently reconsidering and revising methods of sampling in order to maintain the efficiency of the work done under the Act, and to avoid stereotyped procedure.”

And also:—“It is important that the officer responsible for the direction of sampling should frequently consult with the public analyst.”

The Fertilisers and Feeding Stuffs Act, 1906.

The year 1910 was the first complete year in which this Act has been followed up in Halifax, and already an instance of a grossly fraudulent nature has been detected. The resulting prosecution is now pending.

The samples have generally been taken without formalities, as is recommended by the Board of Agriculture and Fisheries, which is the authority under the Act.

In some cases vendors have been advised of their omission of some duty in respect of the Act, such as making or selling without providing an analysis of the article for the information of the purchaser. I am of opinion that in addition to the requirement of an analysis there should be a minimum limit of strength in fertilisers. I find it is quite possible for a very weak, practically worthless, article to be sold under cover of an analysis, which whilst revealing its true character to the initiated is not in the least understood by the ordinary purchaser who does not know what the strength should be and has no knowledge of the importance of the position of a decimal point in a figure.

I should like to repeat my opinion, expressed in the last report, that caged birds and dogs should be brought within the scope of the Act. To this end a case, should one present itself, might be sent up to the Board for their consent to a prosecution.

A leaflet, such as described in my last report, has been printed and distributed to the farmers within the Borough, who, true to the characteristics of their class, are slow to take advantage of the facilities it offers.

The article found to be particularly bad, and which is to be the subject of a prosecution, was named "Burgess' Famous Plant Food." It was found on sale in packets in the market. A good service will be rendered the public by stopping the imposition of this fraud upon them. It appears to be widely distributed in the North, from Rochdale as the centre.

COUNTY BOROUGH OF HALIFAX.

THE
Sanitary Inspector's Report

FOR THE
YEAR ENDED 31st DECEMBER, 1910.

*To the Chairman and Members of the
Health Committee.*

GENTLEMEN,

I have the honour and pleasure of laying
before you for your consideration my Thirty-sixth
Annual Report on the operations of the Health
Department for the year ended December 31st, 1910.

TOWN HALL, HALIFAX.

May, 1911.

HEALTH DEPARTMENT.

Summary of Work Done.

Total Number of Visits, House to House Inspection	2450
" " " Lodging Houses and Furnished Rooms	589
Number of Visits to Houses with reference to Defective Drainage	5703
Number of Visits to Houses with reference to Cleanliness, Overcrowding, &c. ...	171
Number of Visits to Houses with reference to Infectious Diseases... ..	1522
Number of Notices Served	688
Rooms Disinfected	686
Cases Removed to the Hospital	237
Infectious Diseases reported	464
Letters served (referring to Nuisances, &c.) ...	368
Summonses taken out... ..	10
Smoke Observations taken	582
Old Ashpits altered to Goux System	13
Goux Closets registered	65

It must be remembered that many nuisances are frequently included under one notice, and therefore the number of nuisances represent considerably more than the number of notices.

Removal of Nuisances.

The following table shows the nature of nuisances registered, and work carried out after mere verbal notice.

Nature of Nuisances.				Number Registered
Defective Sink Drains	...	...	...	159
„ „ Pipes	...	...	...	56
„ „ Syphon Traps	...	...	...	68
„ Basement Drains...	...	...	...	74
„ Yard Drains	...	...	...	46
„ Urinal Drains	...	...	...	5
„ W.C. Drains	...	...	...	81
„ Area Drains	...	...	...	23
„ Private Street Drains	...	...	...	1
Made-up Sink Pipes	...	...	...	148
Defective Sink Stones	...	...	...	50
Made-up Bath Pipes	...	...	...	3
„ Lavatory Pipes	...	...	...	6
„ Basement Drains	...	...	...	35
„ Water Closets	...	...	...	30
„ Yard Drains	...	...	...	70
„ Urinal Drains	...	...	...	8
„ Gullies	...	...	...	84
„ Private Street Drains	...	...	...	8
„ Intercepting Traps	..	...	...	7
Untrapped Basement Drains	...	...	...	12
„ Sink Drains and Pipes	...	...	...	155
„ Area Drains	...	...	...	27
„ Yard Drains	...	...	...	14
„ Urinal Drains	...	...	...	1

NUISANCES—*Continued.*

Nature of Nuisances	Number Registered
Untrapped Bath Pipes	9
„ Lavatory Pipes... ..	12
Drains not efficiently Trapped :	
Sink Drains	12
Cellar Drains	20
Yard Drains	10
Area Drains	3
Sink Drains and Pipes requiring Disconnecting ..	172
Defective Fall-pipe Drains	73
„ Fall-pipes	120
„ Spouting	121
„ Roofing	28
Broken Pot and Iron Traps	91
Insufficient Supply of Water to Closets ...	33
Nuisances from Water in Cellar	86
„ Want of Drains	10
„ Smoke	13
„ Swine	4
„ Poultry	2
„ Pigeons	2
„ Rabbits	2
Houses Overcrowded	19
„ requiring Limewashing	22
Accumulations of Offensive Matter	63
Privies requiring Limewashing	92
Dirty Passages	48
Insufficient Privy Accommodation	29
Offensive Ashpits and Privies	72

NUISANCES—*Continued.*

Nature of Nuisances				Number Registered
Offensive Goux Closets	...	...	...	184
„ Ash Tubs	..	...	...	448
Doors off Closets	...	...	...	52
„ Ashes Tub Places	...	...	...	40
Dilapidated Closets	...	...	...	111
Ashpits requiring Re-construction	...	...	...	30
Miscellaneous	...	...	...	69
Convert Goux Closets to Water Closets	...	...	...	31
Offensive Street Gullies	...	...	...	33
IN FACTORIES.				
Offensive Smoke	...	...	...	7
Insufficient Closet Accommodation	...	...	...	9
Made-up Drain	...	...	...	6
Insanitary Closets	...	...	...	33
Closets requiring Ventilating	...	...	...	12
Offensive Accumulation	...	...	...	1
Want of Light to W.C.'s	...	...	...	24
Made-up W.C.	...	...	...	16
Dirty Closets	...	...	...	8
Made-up Urinals	...	...	...	2
Offensive Goux Closets	...	...	...	13
IN WORKSHOPS.				
Rooms requiring Lime-washing	...	...	...	29
Dirty Closets	...	...	...	17
Want of Ventilation	...	...	...	7

NUISANCES—*Continued.*

Nature of Nuisances				Number Registered
Defective Water Closets	...	...	...	5
„ Drains	...	...	...	2
„ Troughing	...	...	...	2
Want of Closet Accommodation	...	...	...	7
Defective Sinks ...	...	...	...	3
BAKEHOUSES.				
Bakehouses requiring Lime-washing	...	...	...	35
Sink Pipes to disconnect	...	...	...	3
Defective Drains and Traps	...	...	...	5
Dirty Closet	...	...	...	1
„ Floors	...	...	...	2
Defective Soil Pipe	...	...	...	1

Night Scavenging.

The following table shows the number of ashpits cleansed during the year, and the number of loads of manure and rubbish collected.

Month			Number of Ashpits emptied	Loads of Soil	Loads of Rubbish	Total Number of Loads
January	...	...	206	138	21	159
February	...	...	205	125	36	161
March	...	...	318	154	78	232
April	...	...	335	183	85	268
May	...	...	193	120	36	156
June	...	...	293	178	55	233
July	...	...	333	206	40	246
August	...	...	266	76	63	139
September	...	...	187	124	27	151
October	...	...	362	219	25	244
November	...	...	281	89	74	163
December	...	...	224	94	49	144
TOTAL			3203	1707	589	2296

The total number of ashpits cleansed during the year was 3203, as against 3548 in the previous year.

13 Ashpits with privies have been altered to the Goux system, and ashes tubs supplied in the place of one dry ashpit. The above includes Ovenden, Illingworth, Copley and Northowram Wards.

TABLE SHEWING THE NUMBER OF ASHPITS
WITHIN THE BOROUGH, DECEMBER 31st, 1910.

District	Wards	Ashpits with Privies	Dry Ashpits	Total
1	Akroydon and North ...	37	46	83
2	Ovenden and Illingworth	247	26	273
3	Central and East ...	25	80	105
4	West and South ...	8	174	182
5	Skircoat and Southowram	24	17	41
6	Pellon and Kingston ...	5	32	37
7	Copley ...	95	35	130
8	Warley ...	214	21	235
9	Northowram ...	144	...	144
	TOTAL ...	799	431	1230

Goux Scavenging.

The following table shows the number of closet tubs and loads of ashes collected during the year.

Month				Number of Closet Tubs Collected	Loads of Ashes Collected
January	...	...	...	48715	1798
February	...	...	...	48678	1891
March	...	...	...	51257	2076
April...	...	...	...	52223	1935
May ...	...	...	...	50992	1893
June ...	...	...	...	53396	1697
July ...	...	...	...	51700	1549
August	...	...	...	53192	1631
September	...	...	...	53342	1653
October	...	...	...	51798	1719
November	...	...	...	53348	2003
December	...	...	...	51184	1991
TOTAL ...				619825	21836

The above represents 28173 loads of night soil as against 28238, and 21836 loads of ashes respectively for the preceding year.

The number of additional closets registered is 65, being an increase of two "on the number registered during the year 1909.

The following table shows the number of Goux closet tubs registered since the commencement of the Goux system.

Year	Number of Closet Tubs	Number Registered during each year
1871	1102	1109 in 15 months
1872	1895	786
1873	2440	545
1874	2820	380
1875	3088	268
1876	3316	228
1877	3769	453
1878	4277	508
1879	5858	576
1880	5071	218
1881	5552	481
1882	6057	505
1883	6506	449
1884	7405	899
1885	8049	644
1886	8727	678
1887	9327	600
1888	9831	504
1889	10446	615
1890	11098	652
1891	11644	546
1892	12068	419
1893	13047	984
1894	13450	403
1895	13797	347
1896	14145	348
1897	14444	299
1898	14881	437
145 Tubs returned in connection with property pulled down.		
1899	15287	551
1900	15974	687
1901	16397	461
38 Tubs returned.		
1902	16808	411
1903	17164	356
1904	17428	264
1905	17662	234
1906	17823	161
1907	17920	97
1908	17975	55
1909	18038	63
1910	18103	65

During the year 12 closets have been erected in connection with new property, and 53 have been altered from the old system.

Streets Scavenging.

Table showing number of lineal yards and miles swept during the year in each ward.

Wards				Number of Lineal Yards swept	Miles	Yards
East	...	...	...	3207671	1822	951
Central	...	...	...	1153563	655	763
South	...	...	...	1197793	680	993
West	...	...	...	812447	461	1087
North	...	...	...	869911	494	471
Akroydon	...	...	...	424879	241	719
Southowram	...	...	...	622719	353	1439
Skircoat	...	...	...	561642	319	202
Copley	...	...	...	16347	9	507
Kingston	...	...	...	268747	152	1227
Pellon	...	...	...	365433	207	1113
Ovenden and Illingworth) Part swept by Halifax Gang				1003957	570	757
TOTAL				10505109	5968	1429

Streets Scavenging.

The subjoined table gives at a glance the work done in this department during 1910.

Number of Streets swept	...	...	...	40607
Lineal yards swept	...	...	...	10505109
Square yards swept	...	...	...	83511061
Number of Streets watered	...	...	...	13656
Loads of Water used for that purpose	...	...	...	19130
Loads of Sweepings gathered	...	...	...	9161
Loads of Snow removed from the streets	...	...	...	21311
Number of Gullies emptied	...	...	...	223613
Garbage removed from Market Hall	...	...	...	1003
Loads of Ashes and Sand put on streets	...	...	...	601
Drains flushed	...	...	...	1470

During the year 150 loads of garbage have been removed from fishmongers, fried fish shops, and green-grocers.

Birks Hall Tips.

Table showing the number of loads of ashes and rubbish tipped during the year.

NAME				Number of Loads
Goux Department	...	...	...	19780
Highways Committee	...	...	...	320
Private Firms	...	...	...	2800
Total	...	...	...	22900

Streets Scavenging.

Table showing number of Streets and Miles requiring Sweeping in each Ward.

WARDS	Number of Streets	Number of Lineal Miles of Setting	
		Miles	Yards
East	93	7	1133
Central	41	4	1069
South	50	6	907
West	39	5	3
North	38	4	639
Northowram	32	4	1442
Southowram	39	7	61
Skircoat	41	5	1257
Copley	7	7	1491
Kingston	24	2	1518
Pellon	26	3	1364
Ovenden and Illingworth ...	32	12	495
TOTAL	462	65	819

ANALYSIS OF REFUSE COLLECTED IN THE
BOROUGH OF HALIFAX DURING THE YEAR 1910

			No. of Loads
From Wet and Dry Ashpits	...	...	2296
From Ashes Tubs	...	...	21836
From Goux Closet Tubs	...	...	28173
Sweepings gathered from the Streets, and Refuse from Gullies	...	...	9161
Garbage removed from Market Hall		...	1003
Garbage from Fried Fish Shops	...	...	312
Total Number of Loads			62781

Smoke Observations.

The following table shows the number of Smoke Observations taken during the year, and the average number of minutes of dense smoke emitted.

	Number of Observations taken	Average Number of minutes of Dense Smoke emitted
Number of Observations taken	582	
Number showing moderate Smoke or <i>nil</i>	} 324	
Number of Observations taken for a period of 60 minutes, each showing Dense Smoke	} 258	
Number of Observations show- ing Dense Smoke above the maximum adopted by the Committee	} 31	
Average number of minutes of Dense Smoke emitted from Chimneys	}	1·37

The number of Observations taken during the year is 582. 31 of these showed dense smoke above the maximum allowed by your Committee.

The average number of minutes of dense smoke emitted from the chimneys is 1·37.

TABLE SHOWING THE NUMBER OF INFECTED
HOUSES VISITED BY THE DISTRICT INSPECTORS

WARDS	Enteric Fever	Scarlet Fever	Puerperal Fever	Diphtheria	Erysipelas
Ovenden ...		21	1	47	10
Akroydon ...	1	24		12	1
North ...	1	15	1	2	3
Central ...	1	21	1	7	5
West ...	2	24	1	5	1
South ...	1	17		9	
East ...	1	13		3	3
Southowram ...	7	23		6	3
Skircoat ...	6	14		13	11
Pellon ...	2	8	1	10	3
Kingston ...	4	22	1	11	1
Illingworth ...	2	4		3	7
Northowram ...		6		2	2
Warley ...		15	1	2	
Copley ...	5	10		5	
TOTAL ...	33	237	7	137	50

TABLE SHOWING THE NUMBER OF INFECTIOUS DISEASES REMOVED TO THE BOROUGH FEVER HOSPITAL BY THE DISTRICT INSPECTORS DURING THE YEAR 1910.

			Typhoid Fever	Scarlet Fever	Diphtheria	Total
Ovenden	...	...		15	12	27
Akroydon	...	...		16	1	17
North	...	...	1	13		14
Central	...	...		11	2	13
West	...	...	1	17		18
South	...	...	1	8	6	15
East	...	...		3	1	4
Southowram		...	7	21	4	32
Skircoat	...	...	1	5	6	12
Pellon	...	...		1	8	9
Kingston	...	...	3	10	2	15
Illingworth	...	...	2	1	2	5
Warley	...	...		6		6
Northowram		...		5	1	6
Copley	...	...		10	2	12
Out of Borough		...	1	25	6	32
TOTAL	...		17	167	53	237

Disinfection.

THE FOLLOWING TABLE SHOWS THE NUMBER AND DESCRIPTION OF THE ARTICLES DISINFECTED AT THE DISINFECTING HOUSE, STONEY ROYD, DURING THE YEAR.

Description of Articles				Number of Articles
Beds	...	...	...	625
Mattresses	...	...	...	548
Pillows	...	...	...	1005
Sheets	...	...	...	921
Bolsters	...	...	...	614
Blankets	...	...	...	1273
Counterpanes	...	...	...	563
Carpets and Rugs	...	...	...	82
Drawers and Hose	...	...	...	602
Flannel Vests, Dresses and Petticoats	...	...	...	850
Mats and Sundries	..	...	...	1392
Dressing Gowns and Shawls	...	...	...	289
Coats	...	...	...	140
Cushions	...	...	...	23
Trousers	...	...	...	100
Waistcoats	...	...	...	80
Miscellaneous	...	...	...	14
TOTAL				9121

Canal Boats.

During the year 1910, 38 Inspections have been made, and in every case the Boats were found clean and in good condition.

These Inspections are made periodically by the Chief Sanitary Inspector.

There has not been a single case of sickness or overcrowding during the year, and where women and children were on board, proper provision was made for the division of the sexes.

Of the 38 Boats inspected there were 4 with women and children, and 3 with women, the children having been brought for the single journey only.

All Boats were free from Bilge water, Ventilation was fairly good, and good provision was made for the storage of water for domestic purposes.

All Boats plying in this district are registered either at Goole, Mirfield or Leeds, consequently no arrangements have been made for registration.

Number of Boats Inspected	Number Registered to carry	Number of Males on board	Number of Females on board	Total
38	254	75	7	82

AGES OF CHILDREN FOUND ON CANAL BOATS :

Number	Years .						Total
	Under 1	1	2	4	6	8	
	1	1	1	2	2	2	9

TABLE SHOWING PROSECUTIONS UNDER THE SALE OF FOOD AND DRUGS ACT,
AND PUBLIC HEALTH ACT.

Date	Defendant's Name	Nature of Offence	Decision of Court				Remarks
			Penalties	Costs	Total		
1910 Jan. 21st ...	Messrs. Calverts, Forest Mills, Ovenden ...	Neglecting to provide efficient Sanitary Accommodation at the Factory.	£ s. d. 2 0 0	£ s. d. 0 5 6	£ s. d. 2 5 6	£ s. d. 2 5 6	Commencing to day there would also be a fine of £1 per day, but this would be suspended for a month, and would not be imposed if the work was car- ried out within that period by Messrs. Calvert.
Jan. 21st ...	Charles E. Farrar, 124, Boothtown Road ...	Selling Milk adulter- ated with 21·2 per cent. of added water	0 10 0	0 5 6	0 15 6	0 15 6	
Jan. 21st ...	Fred H. Barker, Punch Bowl Inn Boothtown ...	Selling Milk adulter- ated with 14·8 per cent. of added water	10 0 0	0 5 6	10 5 6	10 5 6	
Jan. 21st ...	Fred H. Barker, Punch Bowl Inn Boothtown ...	Selling Milk adulter- ated with 25·1 per cent. of added water	10 0 0	0 5 6	10 5 6	10 5 6	

Feb. 1st	...	Fred Shaw, 155, Ovenden Road	Exposing for sale a piece of Pork, being portion of ribs at 155, Ovenden Road, the said pork being diseased, and unfit for food.	...	...	...	...	Adjourned to February 8th	
Feb. 1st	...	Fred Shaw, 155, Ovenden Road	Depositing a side of Pork for the purpose of sale at 155, Ove- den Road, the said pork being diseased and unfit for food.	...	...	...	...	Adjourned to February 8th	
Feb. 8th	...	Fred Shaw, 155, Ovenden Road	Exposing for sale a piece of Pork, being portion of ribs at 155, Ovenden Road, the said pork being diseased, and unfit for food.	1	0	0	0	0	5	6	1	5	6

TABLE SHOWING PROSECUTIONS UNDER THE SALE OF FOOD AND DRUGS ACT,
AND PUBLIC HEALTH ACT.—*Continued*

Date	Defendant's Name	Nature of Offence	Decision of Court			Remarks
			Penalties	Costs	Total	
Feb. 8th ...	Fred Shaw, 155, Ovenden Road	Depositing a side of Pork for the purpose of sale at 155, Ovenden Road, the said pork being diseased and unfit for food.	£ s. d. ...	£ s. d. 0 3 0	£ s. d. 0 3 0	The case was withdrawn on payment of costs.
Aug. 5th ...	Messrs. Feather Bros., Winding Road ...	Permitting Dense Smoke to be emitted from the chimney of their works, Winding Road.	1 0 0	0 6 0	1 6 0	Order to Abate within one month.
Sep. 13th ...	George Platts, Jackroyd Farm, Wheatley ...	Slaughtering on unlicensed premises at Jackroyd Farm, Wheatley.	5 0 0	0 5 6	5 5 6	Or two months' imprisonment

Order to Abate
within one
month.

Order to Abate
within one
month.

Permitting Dense
Smoke to be emitted
from the chimney of
their Works, Bow-
ling Dyke.

Permitting Dense
Smoke to be emitted
from the chimney of
their works, Raglan
Street (old chimney)

Messrs. H. Fletcher,
Bowling Dyke ...

Fletcher Bros., Ltd.,
Raglan Street ...

Oct. 11th ...

Oct. 11th ...

0 8 0 0 8 0

0 7 0 0 7 0

...

...

The preceding table shows 10 prosecutions as against 2 in the preceding year.

The total fines, including costs amounted to £32 7s. 0d.

Vans and Tents.

These were regularly inspected during the Spring and Summer Fairs, and at other times when visiting the Town. They were reported to be in a clean condition, and free from any infectious disease.

During the year 2450 houses have been inspected, but under the Town Planning Act, a considerable amount of time will be taken up in getting all particulars as to the condition and surroundings of each house as required by the Act. If this work is to be done without any addition to the staff, the number of houses inspected will be considerably less in the future.

Streets Scavenging.

The number of Streets cleansed during the year is 40607, and the number of loads of Sweepings 9161, being an increase of 676 and 195 respectively over the previous year. This increase may have been brought about to some extent by the mildness of the weather during the latter part of the winter.

Smoke Observations.

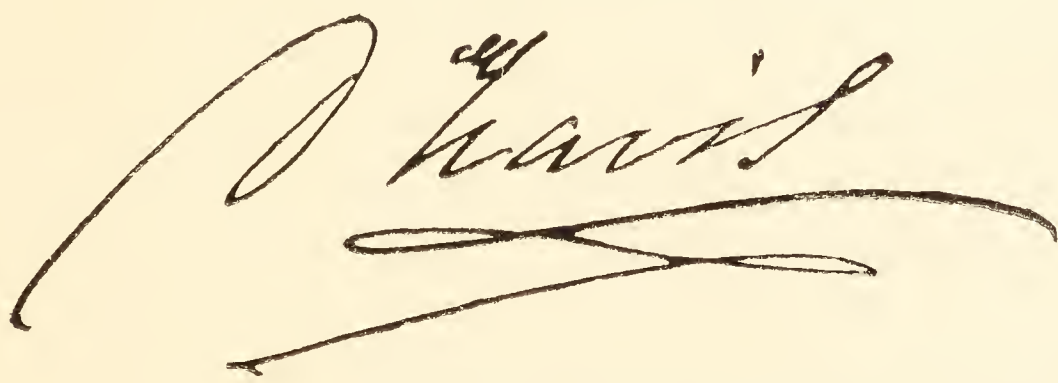
The number of Observations taken is 582, an increase of 38 over the previous year. The average number of minutes of dense smoke emitted is 1·37 against 1 in the previous year. A number of Firms are making arrangements for alterations in connection with their Furnaces at considerable cost, with a view to reducing the amount of dense smoke to a minimum.

During the year 15 samples of Fertilisers and Feeding Stuffs have been purchased and submitted for Analysis. Nearly the whole of the Samples were purchased unofficially. In 13 cases, both Fertilisers and Feeding Stuffs were genuine, and 2 adulterated. In 3 cases samples of Fertilisers had been sold without any label giving particulars as to their composition, as required by the Fertilisers and Feeding Stuffs' Act. Letters were sent in each case to the Seller, drawing their attention to this omission.

I desire again to acknowledge the valuable assistance rendered me by the District Inspectors and the Chief Clerk (Mr. J. W. Jackson), and his staff during the year.

I am,

Your obedient Servant,

A handwritten signature in dark ink, appearing to read 'J. W. Jackson'. The signature is written in a cursive style with a large, sweeping initial 'J' and a long, horizontal flourish extending to the right.

Chief Sanitary Inspector and
Scavenging Superintendent.

APPENDIX.

VITAL STATISTICS OF THE BOROUGH OF HALIFAX DURING 1910 AND PREVIOUS YEARS.

Year.	Population estimated to Middle of each Year.	Births.		TOTAL DEATHS REGISTERED IN THE DISTRICT					Total Deaths in Public Institutions in the District.	Deaths of Non- residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	NET DEATHS AT ALL AGES BELONGING TO THE DISTRICT.	
		Number.	Rate *	Under 1 year of age.		At all ages.						Number.	Rate.*
				Number.	Rate per 1,000 Births Registered	Number.	Rate.*						
1	2	3	4	5	6	7	8	9	10	11	12	13	
1900	98,910	2316	23·4	314	135	1874	18·9	277	42	19	1851	18·7	
1901	105,120	2351	22·3	301	128	1726	16·4	294	38	21	1709	16·2	
1902	105,950	2225	21·0	324	145	1645	15·5	282	36	25	1634	15·4	
1903	106,800	2248	21·0	279	124	1610	15·0	308	54	36	1592	14·9	
1904	107,000	2154	20·1	282	130	1662	15·5	303	52	33	1643	15·3	
1905	107,500	2072	19·2	271	130	1651	15·3	319	75	42	1618	15·0	
1906	108,000	2070	19·1	242	116	1741	16·1	420	107	40	1674	15·5	
1907	108,500	1927	17·7	195	102	1655	15·2	377	145	48	1558	14·3	
1908	107,500	2118	19·7	216	101	1664	15·4	426	139	36	1561	14·5	
1909	105,750	1840	17·0	183	99	1654	15·3	445	132	30	1552	14·4	
Averages for years 1900-1909	} 106,303	2132	20·1	260	121	1688	15·8	345	82	33	1639	15·4	
		1860	17·1	166	89	1543	14·2	455	139	27	1431	13·2	
1910	108,200	1860	17·1	166	89	1543	14·2	455	139	27	1431	13·2	

* Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated population.

Table showing the number of Infectious Diseases in each locality of the Borough, notified during the year, and classified according to age; also the number of Cases removed from each locality to the Borough Fever Hospital.

NOTIFIABLE DISEASES.	CASES NOTIFIED IN WHOLE DISTRICT.							TOTAL CASES NOTIFIED IN EACH LOCALITY.															NUMBER OF CASES REMOVED TO HOSPITAL FROM EACH LOCALITY.																
	At all Ages.	At Ages—Years.						Orenden Ward.	Akroydon Ward.	North Ward.	Central Ward.	West Ward (W).	South Ward.	East Ward.	Southwam Ward (H).	Skircoat Ward.	Copley Ward.	Fellon Ward.	Kington Ward.	Illingworth Ward.	Northwam Ward.	Warley Ward.	Orenden Ward.	Akroydon Ward.	North Ward.	Central Ward.	West Ward (W).	South Ward.	East Ward.	Southwam Ward (H).	Skircoat Ward.	Copley Ward.	Fellon Ward.	Kington Ward.	Illingworth Ward.	Northwam Ward.	Warley Ward.	Non-Residents.	Total cases removed to Hospital.
		Under 1.	1 to 6.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.																																
Small-pox ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria including Membranous Croup ...	137	...	39	76	13	9	...	47	12	2	7	5	9	3	6	13	5	10	11	3	2	2	12	1	...	2	...	6	1	4	6	2	8	2	2	1	...	6	53
Erysipelas ...	50	...	...	6	3	34	7	10	1	3	5	1	...	3	3	11	...	3	1	7	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	237	...	49	145	36	7	...	21	24	15	21	21	17	13	23	14	10	8	22	4	6	15	15	16	13	11	17	8	3	21	5	10	1	10	1	5	6	25	167
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	33	...	...	9	9	15	...	...	1	1	1	2	1	1	7	6	5	2	4	2	...	...	...	...	1	...	1	1	...	7	1	...	...	3	2	...	...	1	17
Relapsing Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	7	...	...	...	2	5	...	1	...	1	1	1	...	...	...	...	...	1	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Plague ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Spotted Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTALS...	464	...	88	236	63	70	7	79	38	22	35	33	27	20	39	44	20	24	39	16	10	18	27	17	14	13	18	15	4	32	12	12	9	15	5	6	6	32	237

Table showing Causes of, and Ages at, Death during the year 1910 in the several localities of the Borough.

CAUSES OF DEATH.				DEATHS IN OR BELONGING TO WHOLE DISTRICT.							DEATHS IN OR BELONGING TO LOCALITIES (AT ALL AGES).														Total Deaths in Public Institutions in the District.			
				At Subjoined Ages.							Orsden Ward.	Akroydon Ward.	North Ward.	Central Ward.	West Ward (W).	South Ward.	East Ward.	Southwam Ward (H).	Skircoat Ward.	Copley Ward.	Pulton Ward.	Kingsdon Ward.	Tilsworth Ward.	Northwam Ward.		Warley Ward.		
				At all Ages.	Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.																		
Measles	14	2	12	...	...	...	...	1	...	4	2	1	...	1	1	...	...	1	...	...	3	...	...	...
Scarlet Fever	4	...	3	1	...	...	...	1	...	...	...	...	...	1	...	1	...	1	...	...	...	...	...	1
Whooping Cough	14	8	6	...	...	...	...	1	...	2	1	2	1	2	2	...	1	1	1	...	...	...	...	...
Diphtheria and Membranous Croup	23	...	14	7	1	1	...	10	2	...	2	1	1	1	...	2	2	1	1	...	...	...	...	12
Croup	1	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...
Enteric Fever	9	...	...	3	2	4	...	1	1	...	2	...	...	...	...	...	...	1	3	...	...	...	...	6
Epidemic Influenza	8	...	...	...	...	5	3	1	...	...	...	1	1	1	1	1	...	...	1	...	...	1	...	...
Diarrhœa	12	5	3	...	...	3	1	2	...	5	1	...	1	3	...	...	...	...	...	...	...	...	...	3
Enteritis	8	4	1	2	...	1	...	1	1	1	...	1	...	1	2	...	...	...	...	...	...	1	...	1
Gastritis	6	3	1	...	...	1	1	...	1	1	1	...	1	...	2	...	...	2	...	...	...	...	1	1
Puerperal Fever...	2	...	...	...	...	2	...	...	...	...	1	...	...	...	...	...	2	...	...	...	...	...	...	2
Erysipelas	3	...	...	...	...	3	...	...	...	...	1	...	2	...	...	...	...	...	...	...	...	...	...	1
Phthisis	103	...	2	4	14	79	4	5	8	8	11	14	4	9	9	7	2	8	5	9	4	...	...	36
Other Tubercular Diseases	19	2	1	1	5	9	1	1	...	2	2	2	...	2	...	2	...	2	3	2	...	1	...	12
Cancer, Malignant Disease	102	...	...	...	...	78	24	12	...	8	6	8	11	8	9	12	2	7	7	5	5	2	...	44
Bronchitis	118	10	4	...	...	46	58	7	6	6	11	9	12	15	12	6	6	8	10	8	1	1	...	21
Pneumonia	121	13	24	4	8	46	26	14	6	17	9	7	10	15	7	9	3	9	5	7	2	1	...	26
Pleurisy	1	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Diseases of Respiratory Organs	14	2	...	...	...	8	4	2	...	2	1	2	...	...	1	...	2	1	...	1	...	...	...	...
Alcoholism, Cirrhosis of Liver	9	...	...	...	...	9	...	...	1	2	...	2	1	...	...	1	...	1	...	...	...	...	...	3
Premature Birth...	45	45	...	...	...	...	...	2	1	10	3	6	...	3	6	2	...	4	5	2	...	1	...	1
Diseases and Accidents of Parturition	12	...	...	...	2	10	...	2	1	1	1	3	...	...	2	...	...	...	1	1	...	...	...	...
Heart Diseases	157	1	1	3	4	89	59	13	17	14	9	14	9	14	9	13	2	10	14	9	6	4	...	44
Accidents	31	1	3	3	2	14	8	1	1	3	3	5	4	3	2	1	1	1	2	1	...	...	...	29
Suicides	14	...	...	...	...	13	1	...	...	2	1	1	...	2	2	...	...	3	1	...	1	1	...	3
Diseases--Brain and Nervous System	145	4	2	4	3	78	54	9	7	14	8	12	18	11	8	9	4	14	12	9	7	3	...	40
„ Digestive System	67	2	3	8	6	33	15	7	2	6	...	7	6	6	4	2	2	8	6	4	4	3	...	38
„ Urinary System	58	...	2	...	3	41	12	7	4	1	3	5	6	2	7	8	1	8	2	3	1	...	...	17
Old Age	124	...	...	...	...	6	118	6	8	12	7	8	10	12	5	11	5	11	11	13	2	3	...	48
All other Causes...	187	63	24	10	10	53	27	10	14	18	20	17	12	22	11	12	6	11	18	7	3	6	...	67
All Causes	1431	166	106	50	60	633	416	116	82	138	107	127	110	137	102	100	39	113	109	82	41	28	...	455

Vital Statistics of the Borough of Halifax during 1910 and Previous Years.

NAMES OF LOCALITIES.		WHOLE DISTRICT.				OVENDEN WARD.				AKROYDON WARD.				NORTH WARD.				CENTRAL WARD.				WEST WARD.				SOUTH WARD.				EAST WARD.				SOUTHOWRAM WARD.				SKIRCOAT WARD.				PELLON WARD.				KINGSTON WARD.				ILLINGWORTH WARD.				COPLEY WARD.				NORTHOWRAM WARD.				WARLEY WARD.			
YEAR.		Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.																				
1900	...					7146	174	97	24	7152	174	94	19	8129	232	129	33	8950	206	159	37	9690	200	162	39	8712	148	133	15	8620	131	127	21	7598	236	110	27	8206	167	102	14	8170	207	142	26	8964	225	153	25	7280	150	114	26	2570	57	33	4	Newly added area.				Newly added area.			
1901	...					7045	155	113	16	6540	187	104	28	8165	228	167	29	7833	171	146	35	9282	173	133	17	7600	139	111	14	7001	106	172	27	7465	202	134	30	8850	187	117	24	9138	217	149	26	10166	218	116	23	7035	150	108	14	2905	69	37	4	3265	78	58	9	2830	60	44	5
1902	...	105950	2225	1634	324	7174	149	107	23	6560	185	77	26	8250	208	166	45	7835	164	134	34	9282	195	170	23	7613	117	111	16	7008	109	155	24	7485	217	127	39	9080	163	124	18	9225	185	111	21	10310	181	118	25	7105	144	100	14	2908	41	30	4	3270	95	66	8	2845	52	38	4
1903	...	106800	2248	1592	279	7250	159	114	21	6560	171	100	21	8295	229	134	29	7835	187	139	23	9282	155	130	21	7670	132	106	18	7008	112	134	24	7515	176	121	34	9420	211	146	19	9340	193	122	14	10400	197	122	25	7170	157	91	16	2935	39	31	2	3270	70	47	5	2850	60	55	7
1904	...	107000	2154	1643	282	7270	156	106	14	6560	166	122	27	8310	191	155	31	7835	165	128	24	9285	165	136	21	7690	119	116	14	7010	105	151	24	7525	189	99	24	9505	212	153	13	9350	174	122	22	10415	177	115	27	7180	139	114	22	2945	43	35	2	3270	95	55	13	2850	58	36	4
1905	...	107500	2072	1618	271	7280	128	124	17	6630	179	117	30	8345	177	148	35	7835	159	135	28	9285	136	131	19	7690	104	105	12	7010	103	136	15	7530	175	109	26	9690	206	136	17	9420	177	113	23	10460	181	108	13	7210	129	113	11	2970	64	44	6	3285	90	53	14	2860	64	46	5
1906	...	108000	2070	1674	242	7310	146	109	17	6700	156	99	15	8375	211	144	29	7835	142	138	34	9285	167	135	15	7690	110	108	7	7010	123	159	32	7535	169	128	22	9855	173	152	14	9620	165	115	14	10505	193	131	12	7230	131	113	13	2990	53	42	3	3295	71	45	6	2865	60	56	9
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